AIA

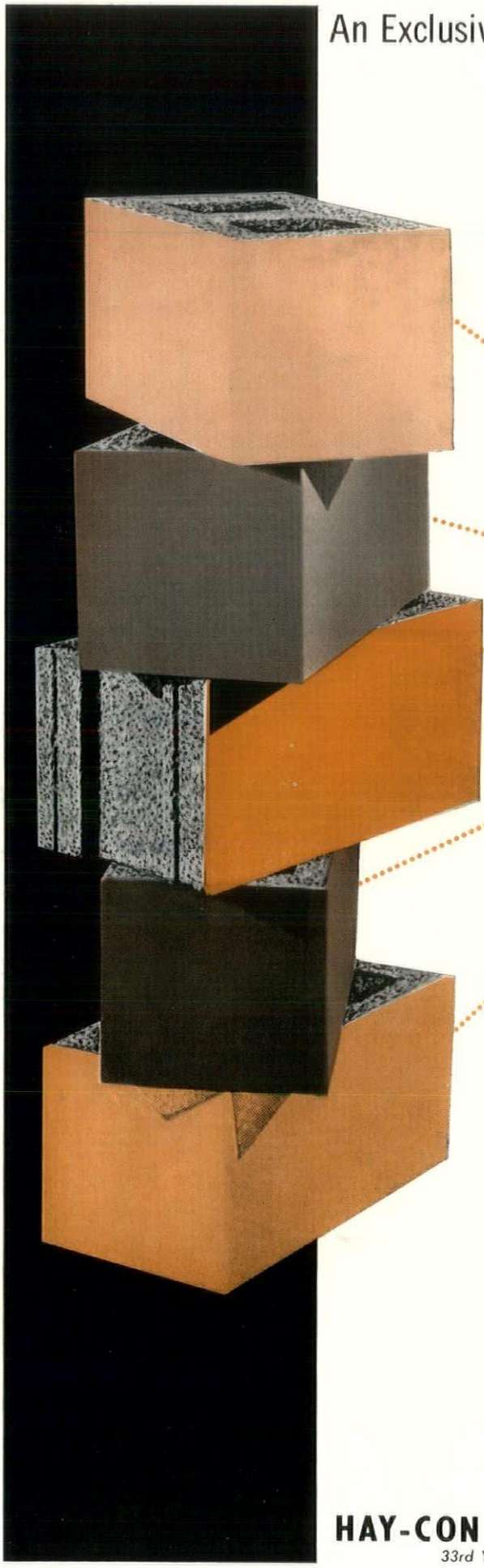
THLY BULLETIN, MICHIGAN SOCIETY OF ARCHITECTS • AUG. 1961 • 50c

AMERICAN INSTITUTE
OF
ARCHITECTS
AUG 2 1961
LIBRARY

INCLUDING
NATIONAL
ARCHITECT

ATE ORGANIZATION OF THE AMERICAN INSTITUTE OF ARCHITECTS

An Exclusive from **HAY-CON . . .**

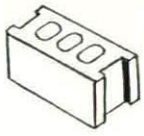


GLAZEX™

a revolutionary new block with PERMANENT COLOR FACING

Only the architect's imagination limits the variety of architectural effects made possible by custom-color GLAZEX. You don't select colors for exterior and interior walls from a limited number available; you create colors and we match them. Furthermore, these are colors which can't fade because they are locked in the smooth permanently-bonded GLAZEX surface. GLAZEX has no equal in the construction of economical, finished walls. Available in one or more faces, it actually increases the durability of the block itself.

HAY-CON TILE COMPANY.
33rd Year . . . 1928-1961



12627 Greenfield Avenue
Detroit 27, Mich. · VE. 5-7117

OUR ORGANIZATION HAS THE KNOW-HOW TO GIVE YOU PROMPT, EFFICIENT AND ECONOMICAL SERVICE.

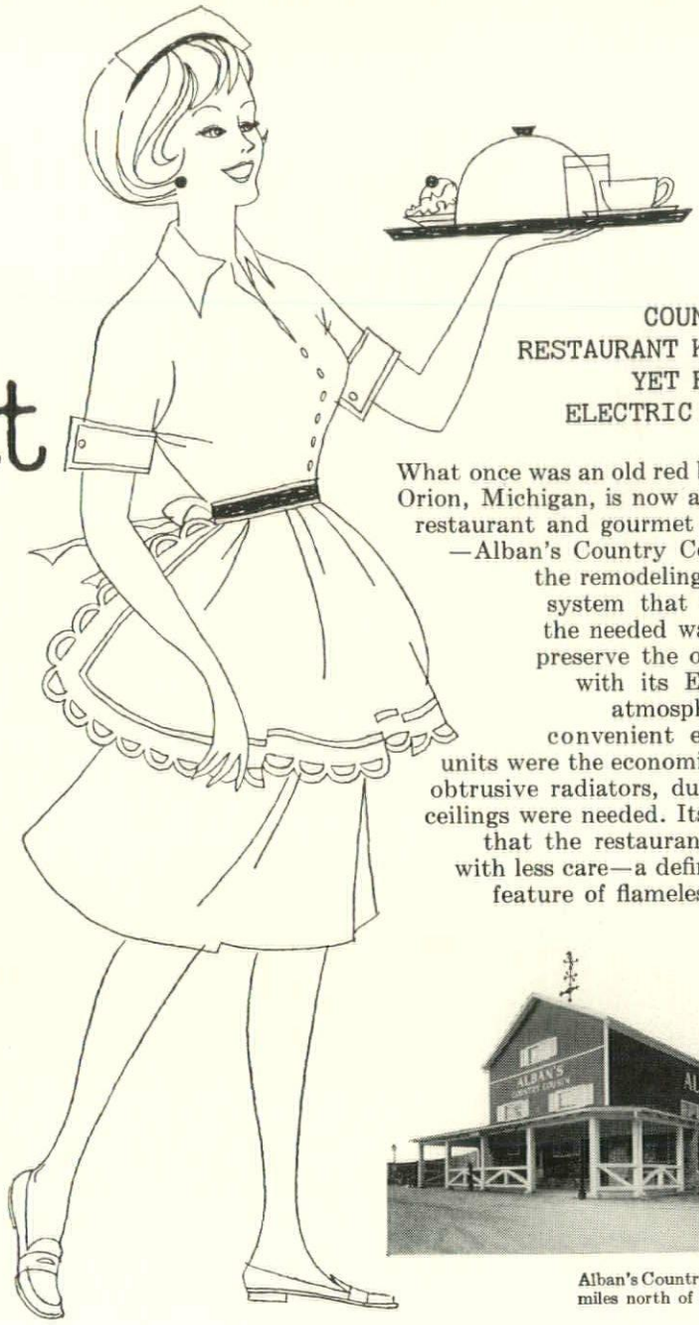
THE HARLAN ELECTRIC COMPANY

901 West Milwaukee, Detroit 2, Michigan, TRinity 3-5600

Monthly Bulletin, Michigan Society of Architects is published monthly at 120 Madison Ave., Detroit 26, Mich. Entered as second-class matter January 15, 1946 at the Post Office at Detroit, Mich. under Act of March 3, 1879. Subscription price $4.00 per year (members $2.00). 50¢ per copy

In our restaurant,

you can't beat electric heat!



ALBAN'S COUNTRY COUSIN RESTAURANT KEEPS WARM, YET RUSTIC WITH ELECTRIC HEAT!

What once was an old red barn near Lake Orion, Michigan, is now an unusual new restaurant and gourmet specialty shop —Alban's Country Cousin. Basic to the remodeling was a heating system that would provide the needed warmth and still preserve the original interior with its Early American atmosphere. Compact, convenient electric heating units were the economical answer. No obtrusive radiators, ductwork or false ceilings were needed. Its owners report that the restaurant stays cleaner with less care—a definite cost-saving feature of flameless electric heat.

Alban's Country Cousin, on M-24 two miles north of Lake Orion, Michigan.

ONLY ELECTRIC HEAT OFFERS BUSINESS AND INDUSTRY SO MANY ADVANTAGES: Whether it's used as the main heating source for an entire building or to add extra warmth in a hard-to-heat area, electric heat provides definite economies in installation, maintenance and supervision. First, it practically cares for itself. You get pinpoint control over zone and room temperatures—dial one temperature here, another there, and if you wish, turn it off completely in still another zone. Electric heat often means savings in space and construction costs. And because it's flameless, it's much cleaner—there are no products of combustion to soil walls and furnishings. So give electric heat a chance and it can solve your heating problems, too . . . at home or in your business.

find out why, in your business too, you can't beat electric heat!

DETROIT EDISON

ROOM 350, 2000 SECOND AVENUE, DETROIT 26, MICHIGAN

I'd like to know more about electric heat. Please send booklets on ( ) COMMERCIAL HEATING
( ) RESIDENTIAL HEATING

NAME _____

COMPANY _____

ADDRESS _____

PHONE _____

CITY _____ ZONE _____

Letters

BULLETIN:

I extend an invitation for you to play golf and have a dinner at the Detroit Architectural Golf League outing at Plum Hollow on September 12, 1961 and at Dearborn Country Club on October 10, 1961.

Enclosed is a copy of our membership roster for 1961, from which you will note that more than one-half are architects, engineers and draftsmen from Detroit, Flint and Bay City areas. The reason for this is that our by-laws provide that the ratio of architects and engineers to manufacturers' representatives and contractors shall be at least fifty percent.

From the roster you may arrange your own foursome. After you have done so please inform me so that I can arrange with our starter to reserve the time that you wish to tee off.

All of our members enjoy reading articles in the Monthly Bulletin, MSA about our outings. In the past we have been pleased with the space you have devoted to DAGL and we hope that we will be able to supply interesting items and photographs for future issues.

DAGL was formed in 1953, so that its members could play golf and enjoy the sport without being bothered with business.

In its first-year operation, the League played golf at 6:00 a. m. at Palmer Park Golf Course for those who could make it . . . while others played at 4:00 p. m. at Warren Valley Golf Course. That first year golf was played 9 holes every other Tuesday. The League was 29 members strong our first year . . . many of whom are still members.

The first banquet at a local chop house was stag only. Twenty-seven members were present to receive trophies.

In the second year, the league grew to 74 members. All the golf was played at Meadowbrook Country Club. The second annual banquet was made a dinner-dance and the wives were invited to attend. This set a precedent which we still maintain, with great success.

Our third year saw us still at Meadowbrook Country Club and our Membership increased to 87.

In the fourth year, the League expanded to over 100 Members, and we were playing at six different Country Clubs. This policy we still maintain. Variety is the spice of life! It has proved successful, since the succeeding years it has increased our Membership to the current 160 Members.

The past years have continued to be pleasant and happy ones for all those who have helped to make the Detroit Architectural Golf League one of the most outstanding organizations related to the building industry.

This is only a brief resume, but it will bring back pleasant memories to those who are long-time members.—GEORGE W. SOMMERS, %Cuthbert & Cuthbert, LOgan 5-9420, President, DAGL

BULLETIN:

To my great surprise I received, forwarded from The Manoir Richelieu, Murray Bay, your two beautiful and very interesting Monthly Bulletins (April and May). I would like to thank you so very much for your thoughtful kindness.

Actually my surprise grew greater and greater when I read the delightfully written article of "The Manoir Richelieu" and found my name printed in it. Therefore I would like to thank you also, and particularly Mr. Gustavus Arnold for his very flattering lines about Mr. G. Warlund and myself.

By the way I have deserted the Manoir this season as I was offered a job as Maitre d'Hotel at the new Golf and Country Club at St. Augustin, named Glendale.

I do enjoy very much my new position, however it is a very hard job to open a new place, but on the other hand, very interesting.

It would be a great pleasure for me to welcome you and Mr. G. Arnold at our Glendale Golf and Country Club.—DORIS JAHN, Maitre d'Hotel, Glendale Golf and Country Club, Montreal, P. Q., Canada.

BULLETIN:

Hope to see you in Washington next week. Whether you make the trip or not, I would like to prevail upon you to dig up a few things which would greatly aid our 11-month-old association.

We are interested in: (1) Copies of your state licensing laws. (2) Info concerning use of rules and regulations by your state licensing board to control practices of architects within your state. (3) Any printed info concerning the old problems of stock plans, architectural bureaus and standard fee schedule. (4) (If you publish a magazine) What is your annual profit or loss? What is your ratio of state vs. national advertising? May we have a rate card?

Will greatly appreciate all or any part of this material. If you do not go to Washington, please send it to us C. O. D. — MYRON TASSIN, AIA, Executive Director, Louisiana Architects Association, AIA

BULLETIN:

There are so many good pictures of some of our members in your Monthly Bulletin, Volume 35, No. 6 that we are writing to ask, if you have copies, may we have two more.

Your magazine is quite interesting and we think very well done. As former editor of the New York Chapter Oculus read your issues many times.—PETER S. VAN BLOEM, Secretary, N. Y. Chapter, AIA

Monthly Bulletin, Michigan Society of Architects, Volume 35, No. 8

including National

Architect

MONTHLY BULLETIN
Michigan Society of Architects
120 Madison Ave., Detroit 26, Mich., WO 1-6700
Talmage C. Hughes, F.A.I.A., Editor & Publisher. Edited and published under the direction of Monthly Bulletin, Inc.: Gerald G. Diehl, James B. Morison, Frederick G. Stickel, Directors.

The name "Monthly Bulletin, Michigan Society of Architects" is owned by Monthly Bulletin, Inc., a subsidiary of the Michigan Society of Architects, a Michigan non-profit corporation. Otherwise owned by Talmage C. Hughes, F.A.I.A., founder (1926), editor and publisher, Executive Secretary of the Society and of the Detroit Chapter, The American Institute of Architects.

OFFICIAL PUBLICATION of the Michigan Society of Architects: Charles A. OBryon, President; Charles H. MacMahon, Jr., 1st Vice President; Harvey C. Allison, 2nd Vice President; Clarke E. Harris, 3rd Vice President; Gerald G. Diehl, Secretary; George W. Sprau, Treasurer; Talmage C. Hughes, Executive Secretary. Directors: Vincent T. Boyle, Paul A. Brysselbout, Joseph T. Daverman, Herbert W. Johe, Earl G. Meyer, Auldin H. Nelson, J. Wesley Olds, David E. Post, Bruce H. Smith, Robert C. Smith, Frederick J. B. Sevald, James E. Tomblinson, Frederick E. Wigen, Philip N. Youtz.

OFFICIAL PUBLICATION 5 AIA Chapters—Detroit, Western Michigan, Mid Michigan, Saginaw Valley, Flint Area; 3 Builders & Traders Exchanges—Detroit, Grand Rapids, Lansing, Producers' Council, Michigan Chapter; 3 Student Chapters of the AIA—at University of Michigan, University of Detroit, Lawrence Institute of Technology; Michigan Architectural Foundation; Women's Architectural League of Detroit.

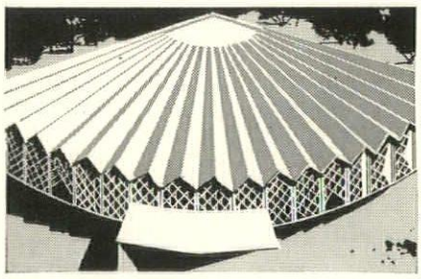
PERSONNEL—Theodore G. Seemeyer, Jr., Editorial and Advertising Director; Nick Demos, Circulation Manager; Ann Stacy, Secretary.

SUBSCRIPTION—$4 per year (members $2.00). 50¢ per copy.
Listed in Standard Rate & Data Service. For further information, see Page 1.

PAC **MEMBER PUBLISHERS ARCHITECTURAL COMPONENTS, 16 Official Publications of Components of The American Institute of Architects, in 26 key states. Advertising and listing in Standard Rate and Data Service. Headquarters, 120 Madison Ave., Detroit 26, Mich. WOodward 1-6700. Eastern Office, 18 E. 56th St., New York 22, N. Y. PLaza 5-3180.**

The best ideas are more exciting in concrete

Concrete "pleats" and precast "lace" create a temple of delicate beauty



From the air, it's a lacy, shimmering fan. Congregation B'nai Israel Synagogue of St. Petersburg, Florida. Architect: Frank G. Bonsey, St. Petersburg. Structural Engineer: Joseph C. Russello, Tampa, Florida. General Contractor: R. M. Thompson Company, Clearwater, Florida.

Only concrete could have inspired it. The serrated roof line and sunscreen façade bring to this contemporary house of worship a stimulating, yet reverent beauty.

And despite its dainty, fragile look, the structure is built to endure. All of concrete's lasting strength is there.

Today's architects find the versatility of concrete gives opportunity for design that is economically practical and dramatically different.

PORTLAND CEMENT ASSOCIATION

Stoddard Building, Lansing 23, Michigan

A national organization to improve and extend the uses of concrete

NATIONAL
ARCHITECT
REG. U. S. PAT. OFF.

Concept of the Complete Architect

By ROBERT F. HASTINGS, FAIA, President, Smith, Hinchman & Grylls Associates, Inc., Architects and Engineers

Reprinted from Consulting Engineer

ARCHITECTURE, as a profession, is on the brink of its greatest change in a half century. This change is one which the profession has approached most slowly and cautiously—and, in fact, has not yet truly accepted. It is a change in basic attitude toward the relationship between architect and engineer.

For the past 50 years, since the time of Dankmar Adler, a prominent Chicago architect, the engineer has occupied a position in architecture which bordered on second class citizenship. He was either a consultant, called upon by the architectural designer to supplement the designer's technological knowledge, or he was a member of a major firm of architects and engineers who always sat below the salt. Now, dictated by a growing awareness of the need for more creativity in the engineering phases of building design, and by an equal awareness of a lack of properly trained and qualified men, the profession is at last taking steps to make the engineer a part of the design team — to welcome him rather than merely tolerate him.

The engineer is often a man who is an architect in his own right, but whose abilities and talents lie more in the direction of design and execution of mechanical, electrical, and structural systems and functions than in the readily recognized building shell.

The start of this movement began more than 50 years ago when midwestern architects, particularly a Chicago group in which Dankmar Adler was prominent, became acutely aware that the civil engineers of the day were inadequately educated in structures as they related to buildings. These civil engineers had a sound foundation in many engineering fields. However, they were unable to understand the sympathy of the architect for his project, and as a result were inadequately translating the needs of his design into a consistently harmonious structure.

It was on this premise that Adler requested the University of Illinois to develop a curriculum which provided an education for those young men who were to integrate the complex structural design required by skyscraper construction with the newly created architectural concepts. The curriculum which resulted was the beginning of formal education in architectural engineering. It was believed this would attract young men principally interested in buildings, but whose greatest competence lay in structures.

At this time, the major design phases of buildings included the architectural shell and the structural framing system. The architects had been educated in the skills of space planning, arts and aesthetics, and handling of the building materials in use at that particular time. They had a broad general background in structural systems, but were not necessarily qualified to design such complex structures. Instead, they had to turn to civil engineers for this phase of building design. However, civil engineers, then as now, were trained in many fields of structure other than that of buildings. The civil engineer was the principal designer and received recognition for the work performed when he designed a bridge or a highway, but, at best, his services in structural design for buildings brought him recognition secondary to that of the architect.

For a time, other schools of architecture incorporated some structural education into their architectural curriculum, and the profession benefited. However, in recent years the curriculum problem has arisen again — in a different form but directly related to the problems that existed in 1900.

Today, the need for architects trained in the intricacies of mechanical and electrical design is as great as it was for the structurally educated 50 years ago. Yet, the colleges of architecture are not incorporating these new design requirements into their curricula, and, in many instances, are decreasing or eliminating the opportunity for structural education.

Within the colleges and universities themselves, educators point to the profession as being the father of the fault. Why, ask the engineering colleges, should we train structural, mechanical, and electrical engineers for architecture? Once they enter that profession, say the engineering schools, they do not receive rewards commensurate with their abilities. Where they are welcomed into other professions, they are given only moderate opportunity in architecture. Would we not, continue the engineering schools, be fulfilling our educational destiny more fully if we educated these men as engineers to offer them the maximum opportunity, the greatest recognition? The architectural colleges give much the same answer. They believe that the profession primarily wants trained architectural designers.

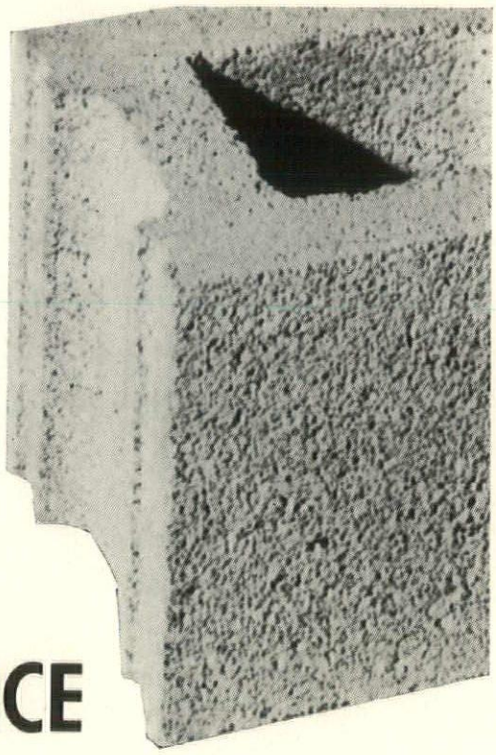
It appears that we now are forcing all young men whose sympathy lies with buildings to become architectural designers, since the word "architecture" in the schools primarily means architectural design. It is generally agreed, however, that no more than five percent of practicing architects today confine their efforts to architectural design.

The complete architect of today, as the clients are coming to know him, is a well-rounded man who can translate the client's architectural needs in terms of architectural design; of mechanical, electrical, and structural systems; and of terrain and environment; as well as assist in financing and planning the client's future needs. Literally, the client expects his architect to understand the rudimentary structure of his business almost as well as he does himself. Therefore, it certainly seems illogical to attempt to create an architectural designer out of everyone who displays aptitude and desire to make building design his life's work.

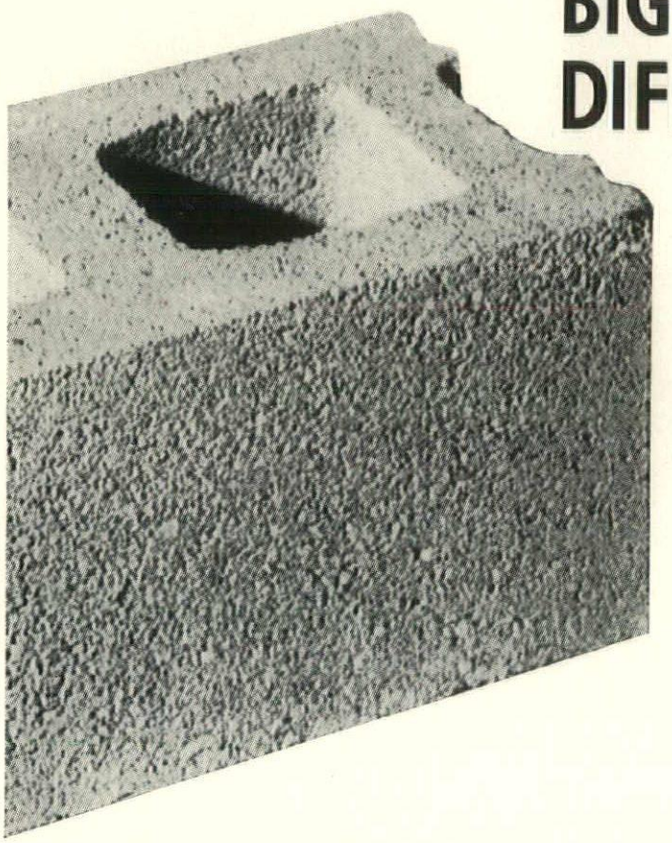
Buildings today are complex machines. The design and execution of the structural, mechanical, and electrical systems of buildings play as great a part in creating the environment for the building's inhabitants as does the exterior shell. Yet, to achieve the total harmony which architecture must have, the varied skills of men trained primarily in architecture must never be lost. The architectural designer must be able to communicate his dream, his concept, to the structural, mechanical, and electrical designers just as these three specialists must convey their concepts to one another and to the architectural designer. Each must have a sympathy for the other's function. The result must be unity, not competition.

During the past 20 years the picture has shown two completely inverse spirals. Professionally, the demand for mechanical, structural, and electrical designers has multiplied, while educationally the trend has been to de-emphasize, and in many colleges eliminate, the opportunity for such schooling. Today most schools of architecture have dropped the term "architectural engineer." It is true that many such colleges have retained a structural option in their schools of architecture, but it is too often a watered-down course in structures. In part, it appears that the architect today is swimming blindly upstream, telling the world he is a generalist, while he turns more and more in the direction of the specialist.

However black the picture may appear, there are indeed sunbeams. The article "Bringing the Design Professions



WHAT'S THE BIG DIFFERENCE



IN CONCRETE MASONRY UNITS?

We can prove our claim to quality. There are hundreds of buildings completed, and now under construction, in which HORN-CLAVED Units were and are being used. Under proper design, shrinkage and cracking are practically unheard of with HORN-CLAVED Units. As a result, where desired, plaster can be applied over HORN-CLAVED Units with excellent results. High-pressure steam curing, the best-known curing method which guarantees Units completely cured and dried within 24 hours—and our electronically-controlled batching method, which makes errorless-sure that all our Units are of the same consistent mix, is your assurance that HORN-CLAVED Units are of the highest quality.

The big difference is that with HORN-CLAVED Concrete Masonry Units you are guaranteed to receive the highest quality Unit on the market today. The quality is even better today than it was last year, or the year before that . . . and the PRICE IS COMPETITIVE!

Why take a chance? For the same price get THE quality Unit — HORN-CLAVED.

CINDER BLOCK INC.

9143 HUBBELL AVENUE
Detroit 28, Mich. • VE. 8-3200

Reliable manufacturers of Lightweight Concrete Masonry Units since 1923

Together," by Philip Will Jr., Consulting Engineer, January 1961, is a frank, forthright presentation of the problem. It is an open recognition by the ppresident of The American Institute of Architects of the need for a change in the thinking of his profession. His views appear to be extensions of The Report of the Committee on the Professions of The American Institute of Architects, issued in January 1960.

Nowhere will one find architects who will oppose the precept. All will admit the evils and give lip service to suggested cures. However, the cures must be administered in the operating room, not in the diagnostic chamber.

To present a fault is simple. To propose an efficient remedy is far more difficult. However, let us examine some remedies. First, let us look at the field of education. Here there appears to be few differences over one precept—that the leadership for education in all phases of building design lies within the colleges of architecture working hand in hand with the colleges of engineering. The colleges of architecture supplied a satisfactory solution a half century ago when they incorporated structures. Surely they are equally capable of expanding to include mechanical and electrical education. Too, the basic requirement of an architect is sympathy for buildings. One must never lose sight of this as the keystone ingredient. And there is no more direct route to the fulfillment of one's professional destiny, graced with this attribute, than through an architectural education.

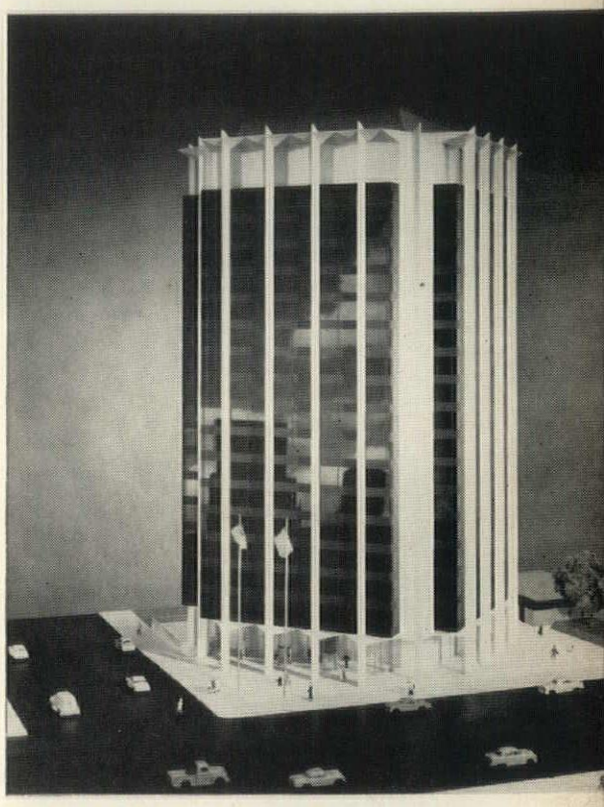
This sympathy must be developed by initial impetus from a basic education in architecture. Without it, the individual will again fall far short of his potential. Thus, all students should receive an initial course, perhaps three years in duration, in the very fundamentals of architecture. Then would come the options. Certainly architectural design should remain dominant. However, it should not be the only door through which the student could pass. The options of mechanical, structural, and electrical design should be offered, for by now the student might have discovered direction and talent away from architectural design but still within the realm of buildings.

The student then would have completed a five, or perhaps six, year course. He would be in the true sense an architect, well trained in all fields, truly expert in one, and with a sympathy for each of the other components. But will the profession accept him? This is still the question which is being asked most challengingly by Mr. Will and other leaders in the profession. Is architecture prepared to admit the young man whose degree might now be Bachelor of Architecture in Mechanical Design to the profession as an architect?

Acceptance must move in several directions. Acceptance denotes recognition within the profession and within each member organization. The boards of accreditation and the professional societies must be willing to embrace these men with the same hand-clasp they use to greet today's graduate architectural designer. Steps already have been taken in this direction. Conferences have been held in which the leaders of the profession have sat with the nation's leaders in architectural education. Agreement that education and professional acceptance must come hand-in-hand has been reached. Education has indicated its willingness, even its desire, to provide a curriculum which will produce trained men for a profession eagerly seeking to welcome and absorb them. Individually, architects have indicated their desire to accept the mechanical, structural, and electrical designers as equal members of the total building design team.

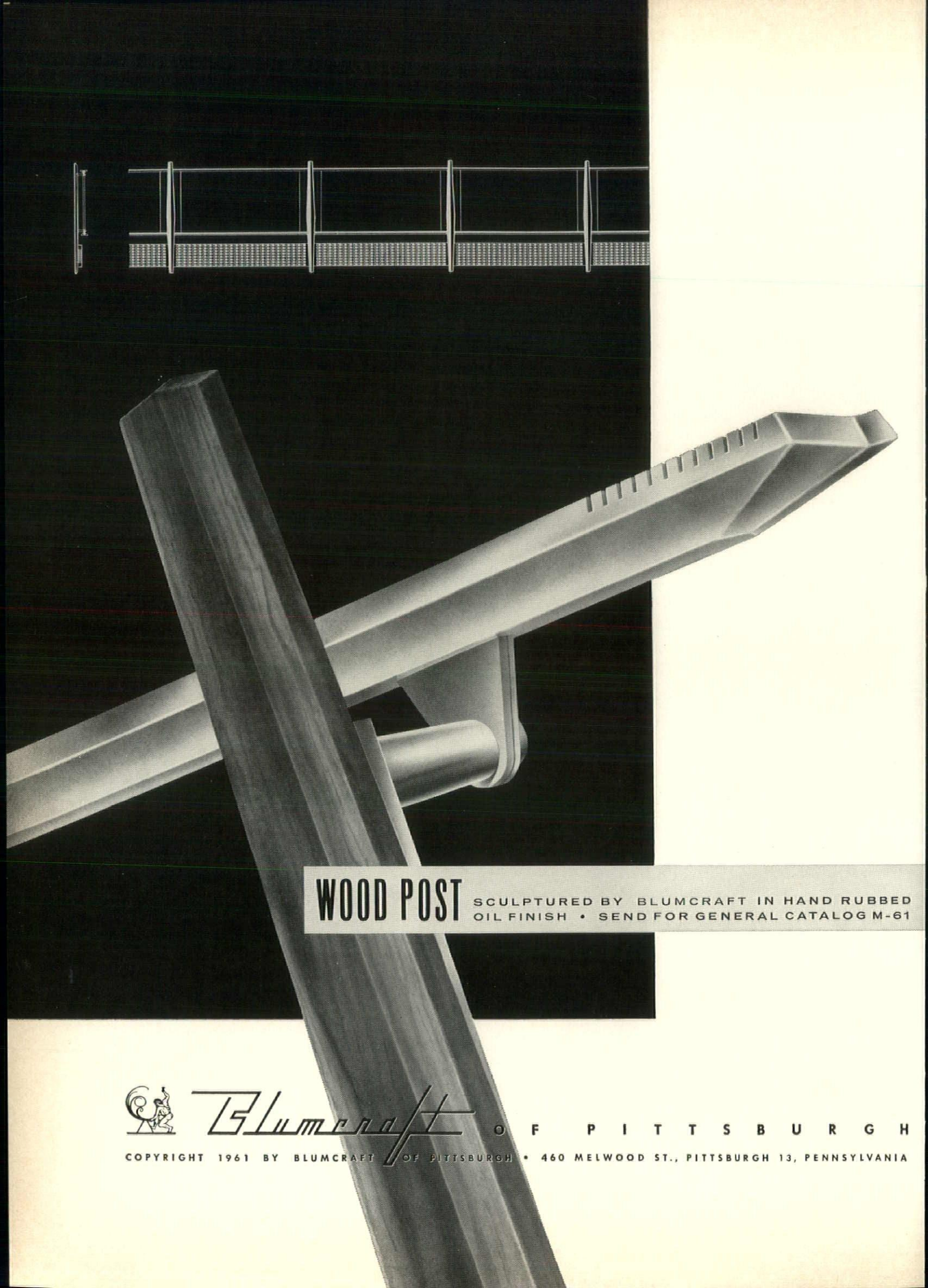
But within the profession there still must be general acceptance. The architect primarily educated in the mechanical, structural, and electrical disciplines must be afforded equal opportunity to rise in his firm to executive level. He must be provided with the same earning opportunity, the same recognition for the achievement of his component segment of the finished structure, as the architectural designer. The opportunities are present. In individual architectural organizations this breakthrough already has begun, and in some enlightened few, is far advanced. What seemed remote at a Conference on Higher Education for the Building Industry, conducted at Cornell University, at Ithaca, New York, in late June 1957, now seems just around the corner.

And just around the corner is a new concept of the complete architect, one as dramatic as each new concept of the profession itself.



Perkins & Will are architects for this general office building for United States Gypsum Company, situated diagonally on the SW corner of Wacker Drive and Monroe Street in Chicago.

Shreve, Lamb & Harmon Associates, of New York City, are architects for six new dormitory buildings for Connecticut College, at New London, Conn. The buildings are sheathed with Seaporcel porcelain enamel curtain walls.


WOOD POST SCULPTURED BY BLUMCRAFT IN HAND RUBBED OIL FINISH • SEND FOR GENERAL CATALOG M-61
Blumcraft OF PITTSBURGH
COPYRIGHT 1961 BY BLUMCRAFT OF PITTSBURGH • 460 MELWOOD ST., PITTSBURGH 13, PENNSYLVANIA

CONFERENCE PROGRAM

MICHIGAN SOCIETY OF ARCHITECTS 18th ANNUAL MIDSUMMER CONFERENCE

GRAND HOTEL, MACKINAC ISLAND, AUGUST 3, 4 AND 5, 1961

CHARLES A. OBRYON, AIA

LINN SMITH, AIA

MRS. LINN SMITH

Shown on this page are some of those who will take part in the Society's Annual Midsummer Conference

Program

THURSDAY, AUGUST 3, 1961

9:00 A.M. to 6:00 P.M. — Arrivals, Registration, Main Lobby
Men $10.00, Ladies Free

12:15 P.M.—Luncheon, Main Dining Room
(All Meals American Plan)

2:00 P.M.—Relaxation — Sports

6:30 P.M.—Reception, West End Hotel Porch or Casino
Sponsor: Mod-U-Wall (and their agents)

8:00 P.M.—Dinner, Main Dining Room

10:00 P.M.—Dancing, Terrace Room

12:00 A.M.—Gaiety, Snack Bar

FRIDAY, AUGUST 4, 1961

8:00 A.M.—Breakfast, Main Dining Room

8:00 A.M.—MSA Board, Breakfast Meeting

10:00 A.M.—MSA Business Meeting, Charles A. OBryon, President, presiding
Speaker:
William H. Scheick, AIA, Executive Director, American Institute of Architects

10:00 A.M.—Ladies Get-Acquainted Coffee Hour

12:15 P.M.—Luncheon, Casino
Program: Lake Michigan Region Planning Committee
Introduction:
Bernard J. DeVries, AIA, Conference Chairman
Speaker:
Paul Frank Jernegan, AIA, Chairman Lake Michigan Region Planning Committee

2:30 P.M.—Golf Tournament—Men and Women
Register at Registration Desk, Frank North, Charles Mock, Co-Chairman

2:30 P.M.—Architects Bull Session for Non-Golfers, Presidents Suite

7:00 P.M.—Presidents Reception, Club Room
Sponsor: Portland Cement Association
Award: "Man of the Year" Trophy

8:00 P.M.—Dinner, Casino
Program, New Ideas-New Materials
Toastmaster:
Adrian N. Langius, FAIA, Past President Michigan Society of Architects
Speaker: Elmer Lundberg, AIA, Pittsburgh Plate Glass Co., National President, Producers' Council, Inc.

10:00 P.M.—Dancing, Terrace Room

12:00 A.M.—Gaiety, Snack Bar

SATURDAY, AUGUST 5, 1961

8:00 A.M.—Breakfast, Main Dining Room

10:00 A.M.—Golf Tournament
Register at Registration Desk

12:15 P.M.—Buffet Luncheon, Casino
Program: Biddle House
Toastmistress:
Mrs. Philip N. Youtz, President, Womens Architectural League of Detroit
Speaker:
W. Stewart Woodfill, Chairman, Mackinac Island State Park Commission
Honored Guests:
Mrs. G. Mennen Williams, Mrs. John B. Swainson

2:30 P.M.—Tour of Biddle House

7:00 P.M.—Reception, Club Room, Sponsor: Valley Metal Products Company

8:00 P.M.—18th Annual Midsummer Conference Banquet, Casino Room, President Charles A. OBryon, presiding
Program:
"Tomorrow's Too Late"
Speaker:
Harry A. Stuhldreher, Assistant to Vice President, United States Steel Corp. All American Quarterback, Four Horsemen, Writer.

10:00 P.M.—Dancing, Terrace Room

12:01 A.M.—Gaiety, Snack Bar

Midsummer Conference

IN LINE WITH the MSA policy of making each Midsummer onference bigger and better than the last, Conference Chairman, Bernard J. DeVries, AIA, of Muskegon, Michigan, has arranged a program for 1961 that should attract many MSA members, their friends and families. Mod-U-Wall and their agents will open the Conference with a reception Thursday evening.

Society President, Charles A. OBryon, AIA will preside at the business meeting and at the other principal sessions. Linn Smith, AIA, Great Lakes Regional Director of The A.I.A., will bring greetings from the Institute. William H. Scheick, AIA, Executive Director of the Institute, will be the speaker at the first session Friday morning.

Immediately following luncheon on Friday, DeVries will preside, and the program will be devoted to the Lake Michigan Region Planning Committee's activities. Mr. Paul Frank Jernegan, AIA, of Mishawaka, Indiana, will be the speaker.

Friday evening our good friend, J. Gardner Martin, of Portland Cement Association, will sponsor the President's reception and present the "Man of the Year" Award to an architect who has notably contributed to the advancement of the profession of architecture during the past year.

Friday evening, following dinner, Adrian N. Langius, FAIA will be toastmaster and the speaker will be Mr. Elmer A. Lundberg, AIA, of Pittsburgh Plate Glass Company and president of Producers' Council, Inc. His subject: "New Ideas—New Materials."

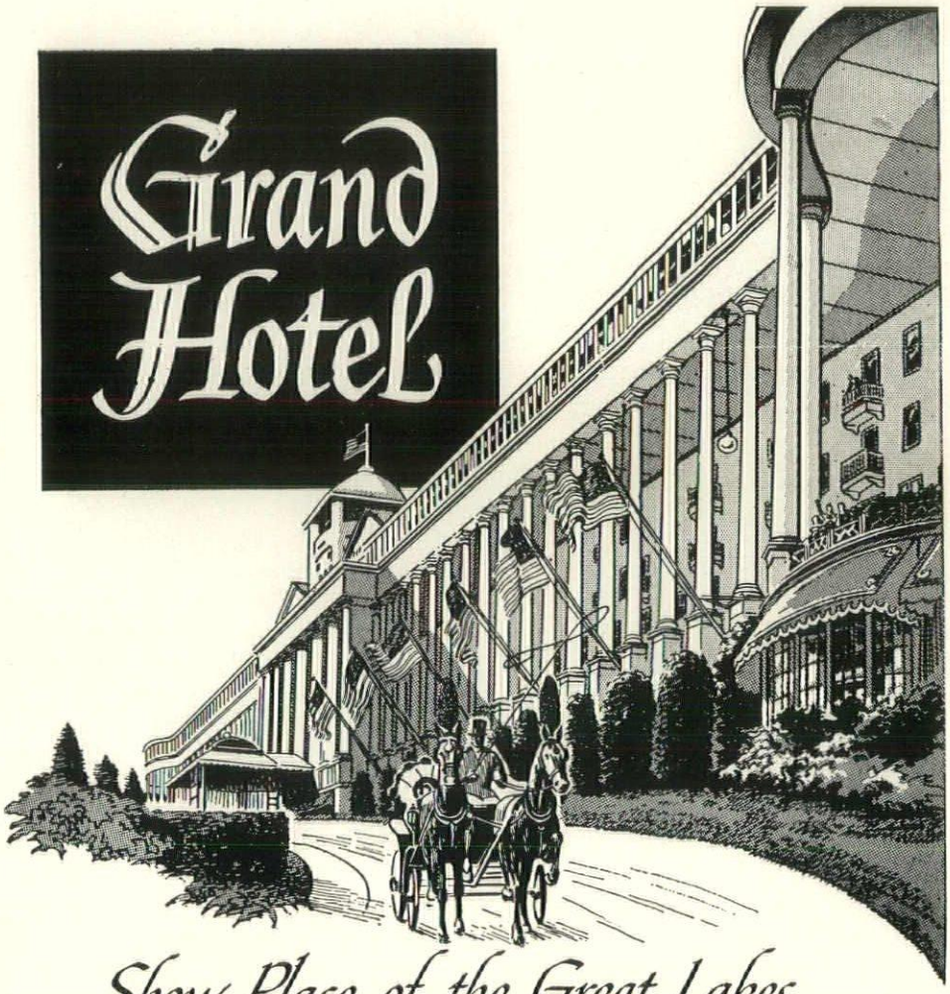
At a luncheon on Saturday, the toastmistress will be Mrs. Frances Youtz, wife of Dean Philip N. Youtz, FAIA, of the College of Architecture & Design, U. of M., and the speaker will be none other than our friend and stanchest supporter, W. Stewart Woodfill, President of the Grand Hotel and Chairman of the Mackinac Island State Park Commission. This will be a program devoted to the Biddle House. Marvin J. Brokaw, of the F. W. Dodge Corporation, is Executive Director of the Biddle House Restoration Committee.

Honored Guests will be Mrs. G. Mennen Williams and Mrs. John B. Swainson.

Saturday evening Valley Metal Products Company will be hosts at a reception, and this will be followed by the Annual Dinner of the Conference. Mr. Harry A. Stuhldreher, Assistant to the Vice President of United States Steel Corporation, and All American Quarterback, member of the Four Horsemen, author and lecturer, will be the speaker. His subject: "Tomorrow's Too Late."

Frank North and Charles Mock will be co-Chairmen of the golf tournament.

There will be many other extras, in the way of recreation, ladies events, etc. Mrs. Linn Smith, wife of our Great Lakes Regional Director, AIA, will be in charge of ladies' events.



... Show Place of the Great Lakes

GOLF
DANCING
SADDLE HORSES
GOLDEN SANDY BEACH
SERPENTINE POOL
TENNIS COURTS
LAKE FISHING
BOATING

Gracious and restful vacation pleasures await you at this famous summer hotel. Picturesque views of historic Mackinac Straits from the world's longest porch . . . gaited saddle horses . . . formal gardens and championship golf courses . . . dancing, concerts, nightly entertainment . . . serpentine pool . . . romantic horse-drawn carriages . . . superb cuisine and equally fine service. All are yours to enjoy at Grand Hotel. Too, nights are refreshingly cool. You sleep under blankets. May we send you free literature?

Suite 100, Grand Hotel, Mackinac Island, Michigan

WORLD'S LARGEST SUMMER HOTEL

MICHIGAN SOCIETY OF ARCHITECTS

— Mid-Summer Conference —

August 3 - 6, 1961

Grand Hotel

MACKINAC ISLAND, MICHIGAN

RESERVATIONS WILL ONLY BE HELD UNTIL 4:00 P.M., UNLESS A DEPOSIT OF $15.00 PER ROOM ACCOMPANIES RETURNED FORM.

Please reserve the following accommodations:

DOUBLE ROOMS

_____Bedroom Living Room, lakeview, private bath, $20.00 daily per person

_____Deluxe Bedroom, twin beds, lakeview, private bath, $19.00 daily per person

_____Twin Bedded Room, lakeview, private bath, $18.00 daily per person

_____Twin Bedded Room, north or east exposure, private bath, $17.00 daily per person

_____Twin Bedded Room, connecting bath, $16.00 daily per person

_____Double Room, lavatory only, convenient to bath facilities, $14.00 daily per person

_____Third person in a Double Room, $14.00 daily

SINGLE ROOMS

_____Single Room, private bath, $18.00 daily

_____Single Room, lavatory only, convenient to bath facilities, $16.00 daily

_____Single occupancy of a Double Room, three-quarters of the full Double Rate

SUITES

consisting of parlor and one or two connecting bedrooms as required. The daily rates for parlors, in addition to room charges, are: $30.00 ☐ $25.00 ☐ $20.00 ☐ $15.00 ☐

CHILDREN RATES: when occupying the same room as parents

_____Up to and including 5 yrs.: $5.00 daily; 6 to 11 yrs.: $9.00 daily; 12 yrs. and over: $14.00 daily
The regular rate applies when children occupy a room by themselves

NOTE: Michigan State Sales Tax of 4% will be added to your account for room and meal charges, and there is a one-time charge of $1.50 to cover the transfer of luggage from the dock to the hotel and return.

Will arrive on _____ A. M. / P. M. Will depart on _____ A. M. / P. M.

Mr.
Mrs.
Miss _____

Address _____

IF SHARING DOUBLE ROOM PLEASE PLACE NAME OF PERSON SHARING SUCH ROOM ON THIS LINE.

_____

FOR YOUR INFORMATION —

DRESS GUIDE: In general, informal resort wear is quite acceptable for both men and women throughout the day. Formal attire in the evening is optional, but is more in vogue on Saturday than any other evening. In accordance with Grand Hotel traditions, guests are requested to observe the following customs of dress: GENTLEMEN — coats in the dining room and public areas in the Hotel at all times. Neckties are not required at breakfast and luncheon, but are necessary after six in the evening. After six, Bermuda shorts are not acceptable. LADIES — slacks are acceptable at breakfast and luncheon only; shorts are not acceptable in the dining room at any time. During the evening, women are dressed in their loveliest for enjoyment of social activities — never do they appear in slacks or shorts after six.

Ladies are advised to bring a warm wrap, for evenings are usually refreshingly cool. Light sportswear is desirable for daytime wear.

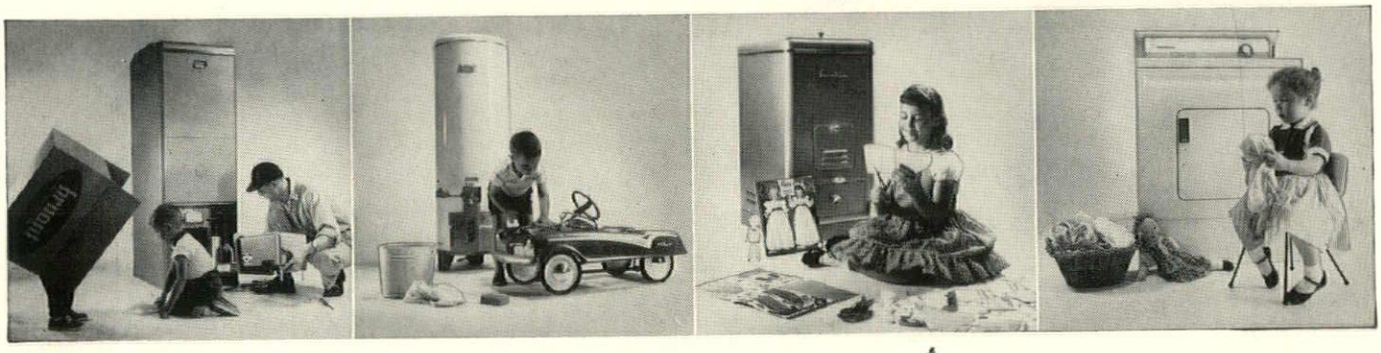
TRANSPORTATION: FERRY BOATS: Ferries leave at frequent intervals from both Mackinaw City (lower peninsula) and St. Ignace (upper peninsula) from 9:00 A. M. 'til about 7:00 or 8:00 P. M. The trip to the island takes 45 minutes. PARKING: Indoor garages and outdoor lots are available at St. Ignace and Mackinaw City. AIRLINES: Capital Airlines offers service to Pellston Airport from both Chicago and Detroit. RAILROADS: N. Y. C. Ry. offers overnight service from Chicago via Detroit daily. BUS SERVICE: Greyhound Lines serve both Mackinaw City and St. Ignace.

— ALL RATES AMERICAN PLAN (Includes Three Meals A Day) —

In Michigan, nearly everybody insists on gas

More Michigan people heat, cook, and heat water with Gas than with any other fuel. And modern Gas appliances are what new-home shoppers look for. Example: the single cooking unit that looks like a built-in (eye-level ovens with table-top burners), yet slides into a pre-planned cutout. This, and other modern Gas appliances, can be the winning features that make your homes move!

MICHIGAN CONSOLIDATED GAS COMPANY



In heating, cooking, clothes drying, refrigeration, water heating and incinerating, your buyers—

Live modern...for less...with GAS

See our **"Barbara Stanwyck Show,"** Mondays, 10-10:30 p.m., WWJ-TV, Channel 4 . . . and listen to **"Business Barometer,"** 6:30-6:40 p.m., WJR, Monday through Friday.

Lake Michigan Region Planning Committee

This committee will meet concurrently at the MSA Mid Summer Conference at Mackinac Island and will be featured as a part of the Conference program.

The Lake Michigan Region Planning Committee is dedicated to making the entire Lake Michigan Region the outstanding urban area of the world. It meets with public officials and private individuals in business and industry whose efforts fall within the scope of the Committee activities.

The Committee organized in May 1960 is a joint committee composed of six members each of the Wisconsin, Northern Indiana, Chicago and Western Michigan Chapters of AIA. It meets monthly at various cities in the region.

The purpose of this joint committee is to encourage, initiate, coordinate and review all planning programs in the Lake Michigan Region from a professional and impartial level.

Its program consists of:

1. Accumulating existing data covering all planning, present and proposed in the region.
2. A general analysis of planning programs.
3. Reviewing planning programs from a regional level and recommendations.
4. Consolidating planning programs in a comprehensive plan in graphic form.
5. Promoting regional planning objectives and keeping the public aware of the continued need for regional planning.

It is aided in its work by an Advisory Council of public planning officials within the region and with other professions in planning such as A.I.P., Landscape Architects, Economists, Lawyers, Geographers, etc.

The working committees within the group are under three general classifications.

1. Urban Problems-Planning & Administration.
2. Transportation and Communications.
3. Health, Welfare and Recreation.

Committee Officers are:

Paul Frank Jernegan, AIA, Chairman
Edward R. Duffield, AIA, Vice Chairman
Sam C. Sit, AIA, Secretary
Roger M. Herbst, AIA, Treasurer
William B. Baime, AIA, Public Relations

LAKE MICHIGAN REGION PLANNING COMMITTEE

Seated (L. to R.): Paul Frank Jernegan, Northern Indiana Chapter, Chairman; Paul Opperman, Advisory Council, Executive Director, Northern Illinois Metropolitan Area Planning Commission; Raymond S. Kastendieck, FAIA, Treasurer AIA, Ex-Officio; G. Wickstead, Advisory Council, Landscape Architect; Edward R. Duffield, Western Michigan Chapter; Roger M. Herbst, Wisconsin Chapter, Treasurer; Sam C. Sit, Chicago Chapter, Secretary; William Baime, Chicago Chapter, Public Relations.

Standing (L. to R.): Arthur Ruttenberg, Wisconsin Chapter; Sylvester Schmitt, Wisconsin Chapter; A. Diemal, Chicago Chapter; James Arkin, Chicago Chapter; William Rammel, Northern Indiana Chapter; Vito Girone, Northern Indiana Chapter; Edward Malo, Northern Indiana Chapter; George Hall, Northern Indiana Chapter; Donald J. McGrath, Western Michigan Chapter; Bernard J. DeVries, Western Michigan Chapter; Carl Zillmer, Western Michigan Chapter.

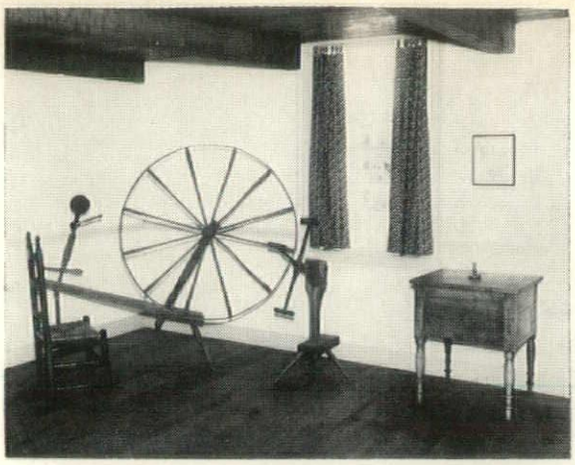
WALD

BIDDLE HOUSE

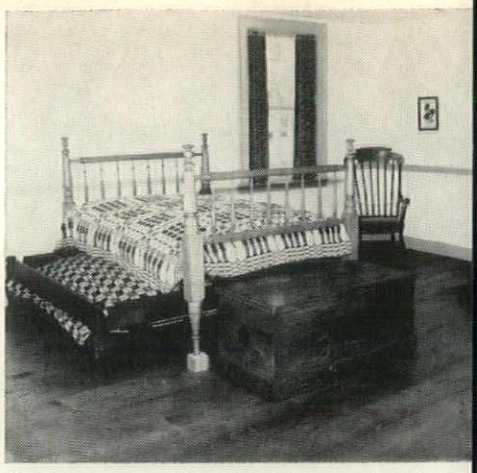
On June 21st, three members of the Biddle House Furnishings Committee went to Mackinac Island to install the gifts acquired this year for Biddle House by the Women's Architectural League of Detroit. Photographs on this page show some of the pieces in place.

WALD plans to continue this project another year to complete the furnishing. The principle pieces still needed are a corner cupboard, dining table and chairs and china and glass for the dining room; a small stretcher table, dry sink and wrought iron and irons for the kitchen; a Sheraton type upholstered chair, a tilt-top tea table and tea service, a brass fender and a hooked rug in one of the early patterns for the living room. The period for these furnishings is roughly 1800-1840 with emphasis on the earlier date.

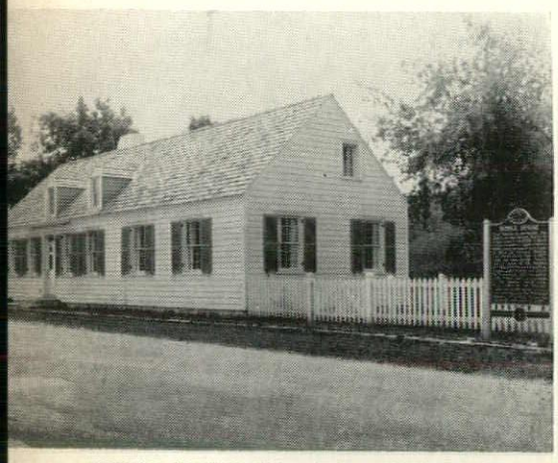
—Photos by Rose



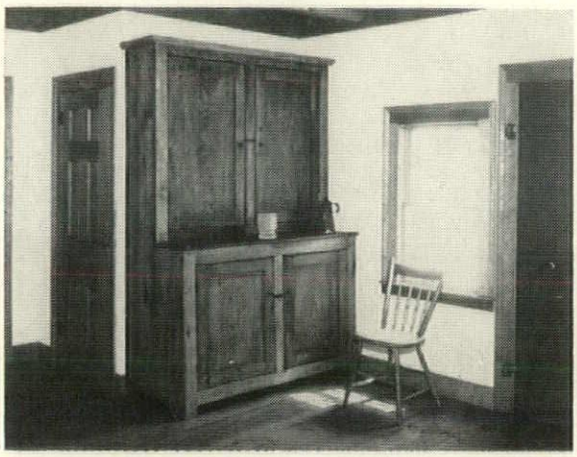
One corner of the dining room: The spinning wheel and yarn reel with automatic counter are gifts of Mrs. Frederick J. Schoettley of Grosse Pointe, Mich. The curtains in this room and the bedroom are of cotton chintz in an allover design of indigo blue, green and white, taken from a Williamsburg print and manufactured by Schumacher.



The large maple bed in this corner of the bedroom was given by Mrs. Martha M. Smock of Ann Arbor. Her grandmother was Mrs. Sarah Durfee, the last of the Biddles to live in the old house. Mrs. Durfee died in 1923. The trundle bed is a gift from Dr. Henry D. Stricker of Detroit and Milford. The coverlet on the large bed is of indigo blue wool and natural linen in the traditional pinetree and snowball design. It was given by Mrs. Roy Perrigo of Royal Oak. The coverlet on the trundle bed, also of indigo blue wool and natural linen, is of a slightly earlier date. It is the gift of Mrs. Richard Wilt of Ann Arbor. In front of the bed is a pine blanket chest, showing traces of the original curry-yellow paint. The two rocking chairs are the gift of Mrs. Elizabeth Robinson of Ann Arbor.



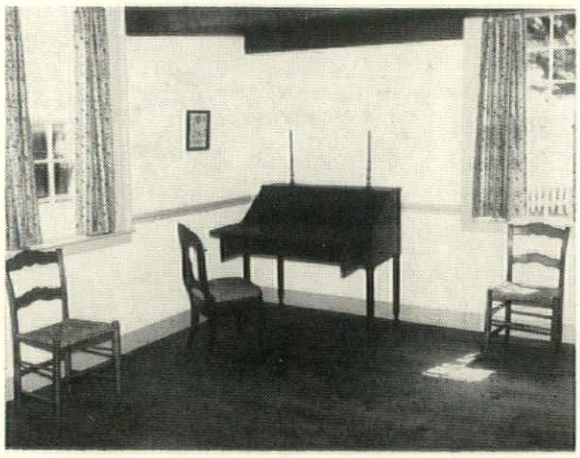
BIDDLE HOUSE: This photograph shows the new placque which has been erected. The shutters of the house are painted a soft greyish blue.



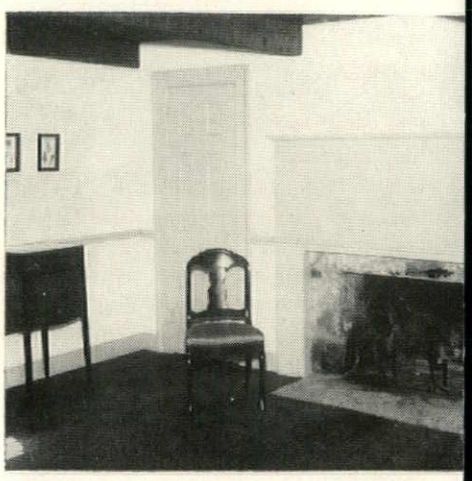
The large pine cupboard and chair beside it were found in the house when the architects and builders began the work of restoration.

Another corner of the dining room: The schoolmaster's desk is of pine and cherry. It was made by William Ball who taught school in New Jersey, 1835-40. Later he homesteaded a piece of land near Allegan, Michigan. William Ball was a descendant of Col. William Ball who was an uncle of George Washington. The chair beside the desk has a split ash seat. It is a gift of Mr. M. R. Baker of Detroit.

The rocking chair in front of the kitchen fireplace was given in memory of Thomas Frank Marston, one of the original members of the Michigan Development Commission which preceded the present Michigan Tourist Bureau. Its date is late 18th century. The ladder-backed rush-seated slipper chair and the wrought iron bread shovel and tongs are gifts of Mrs. Philip N. Youtz of Ann Arbor. To the left of the fireplace is a walnut cradle, the gift of Prof. Ralph W. Hammett of Ann Arbor. On the mantle in the center is a stoneware pitcher given by Mrs. James B. Morison of Detroit. It is flanked by a pair of tin candlesticks painted green, the gift of Mrs. Demaris E. Cash of Ann Arbor. To the right of the fireplace is a "meal" box. Sacks of flour were stored in the back of this and loaves of bread and pies were made on the pull-out tray. Drawer below was for utensils. The warming pan hanging on the wall near the fireplace is an early type with wrought iron handle.



Corner of the living room showing cherry desk with brass candlesticks, an Empire chair of mahogany and two fruitwood chairs with rush seats. The latter were given by Miss Neva DuMont of Lexington, Mich. They were made by Johannes Phillipus Du Mond who was born in 1744 and died in 1805. The family tradition was to hand down the chairs to the oldest son, on his marriage. Records of the DuMonds and DuMonts are in the Dutch Reformed Church, Kingston, N. Y. Curtains in this room are chintz, printed in indigo blue and soft red in the "Clara Ford" pattern from the Henry Ford Museum and manufactured by Greeff.



This view of the living room shows the fireplace with fluted pilasters framing the sides and a flying cornice with dentil molding ornamenting the upper part. All wood trim is painted a colonial blue-grey which corresponds to the color found in scraping down the wood frame of the fireplace.

Great-Grandfather's Mackinac

By WILLARD E. FRAZER, AIA

Some years ago I acquired, through an elderly relative of mine, a copy of **Letters of a Traveller,** by William Cullen Bryant. The only thing I could have told about Mr. Bryant up to that time, was that he was one of the three bearded authors in my seventh grade reader. I might have recalled that he wrote **To a Wildfowl;** perhaps, if pressed, I could have included **Thanatopsis,** some parts of which my mother would recite.

This book is an account of extensive travels Bryant made between 1834 and 1851, the year the edition I have was published. Among these trips, which ranged through Europe and the Eastern United States, are two he made to Mackinac Island in 1846, with several allusions to an earlier visit in 1841. These accounts, written two lifetimes ago, sound as modern as though they were written by James Michener or Robert Ruark last week.

One fact that is not ordinarily thought of is that water transportation then was not as primitive as might at first seem. These travelers on the S. S. Oregon in 1846 left Cleveland around noon and were in Detroit by midnight. "Lock your stateroom" he was told, "as there are many thieves in Detroit." They anchored there until 3 A. M. so that Lake St. Clair could be traversed in daylight. "We saw nothing of Detroit, or the thieves either," he relates. Leaving when they did, they were at Mackinac by 10 o'clock of the second morning, after making stops for firewood and to disembark passengers at Port Huron. This may differ little from the schedule of present-day cruise ships.

He refers in his account to Sarnia as "Fort Saranac." Present-day sources states that Sarnia acquired its modern name in 1836 through a rather involved whim of a British official. At any rate, it is a little late to change. He describes his impressions of the eastern shore of the state, which would, of course, be the Thumb: "All that we could see of the country was a road along the bank, a row of cottages a considerable distance from each other along the road, a narrow belt of cleared fields behind them, and beyond the fields the original forest standing like a long lofty wall, with its crowded stems of enormous size and immense height, rooted in the strong soil-ashes and maples and elms, the largest of their species. Scattered in the foreground were numbers of leafless elms, so huge that the settlers, as if in despair of bringing them to the ground by the ax, had girdled them and left them to decay and fall at their leisure."

He describes Manitoulin and Bois Blanc islands and, continuing, "Beyond another point lay like a cloud the island of Mackinac. I had seen it once before, but now the hazy atmosphere magnified it into a lofty mountain; its limestone cliffs impending over the water seemed larger; the white fort—white as snow—built from the quarries of the island, looked more commanding and the rocky crest above it seemed almost to rise to the clouds . . . a stately object in any condition of the atmosphere. The habitations of this ancient village . . . some of which show you roofs and walls of red-cedar bark confined by horizontal strips of wood, a kind of architecture between the wigwam and the settler's cabin. A few baskets of fish were lifted on board, in which I saw trout of enormous size, trout a yard in length and white-fish smaller, but held perhaps in higher esteem. We could gaze into the clear waters and count the fish as they played about without fear twenty or thirty feet below our steamer, as plainly seen as if they lay in the air."

Landing at Mackinac and describing his routine tourist activities which are of only general interest now, he describes more important points thus:

"The fort which crowns the heights near the shore commands an extensive prospect, but a still wider one is to be seen from the old fort, Fort Holmes, as it is called, among whose ruined intrenchments the half-breed boys and girls now gather gooseberries. It stands on the very crest of the island, overlooking all the rest, places known to history for the past two centuries. For when you are at Mackinac you are at no new settlement."

"In looking for samples of Indian embroidery with porcupine quills, we found ourselves one day in the warehouse of the American Fur Company, at Mackinac. Here, on the shelves, were piles of blankets, white and blue, red scarves and white boots; snow-shoes were hanging on the walls, and wolf-traps, rifles, and hatchets, were strung to the ceiling—an assortment of goods destined for the Indians and half-breeds of the northwest. The person who attended at the counter spoke English with a foreign accent. I asked him how long he had been in the northwestern country.

'To say the truth,' he answered, 'I have been here sixty years and some days.'

'You were born here then.'

'I am a native of Mackinac, French by the mother's side; my father was an Englishman.'

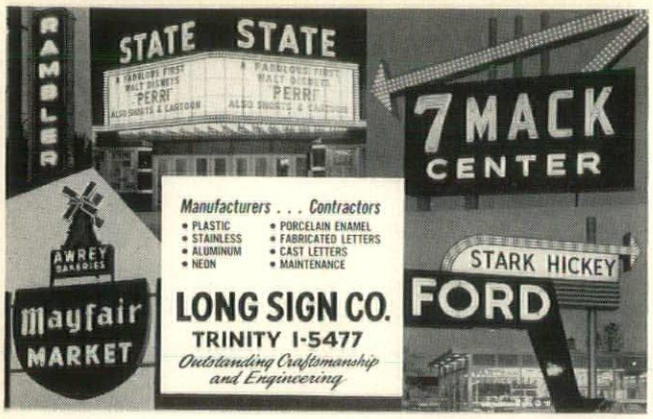
'Was this place as considerable sixty years ago as it now is?'

'More so. There was more trade here, and quite as many inhabitants. All the houses, or nearly all, were then built; two or three only have been put up since.'" (This would further indicate that the Biddle House was built before 1780.)

"I could easily imagine that Mackinac must have been a place of consequence when here was the centre of the fur trade, now removed further up the country. I was shown the large house in which the heads of the companies of **voyageurs** engaged in the trade were lodged, and the barracks, a long low building, in which the **voyageurs** themselves, seven hundred in number, made their quarters from the end of June till the beginning of October, when they went out again on their journeys . . . The Mackinac navigators have given their name to a boat of peculiar form, sharp at both ends, swelled at the sides, and flat bottomed, an excellent sea-boat, it is said, as it must be to live in the wild storms that surprise the mariner on Lake Superior." (These are apparently the craft that are usually referred to as "canoes" in Mackinac Literature. "Boat" would seem to be more in keeping with modern usage.)

"We passed a farm surrounded with beautiful groves. In one of its meadows was fought the battle between Colonel Croghan and the British officer Holmes, in the war of 1813. Three luxuriant beeches stand in the edge; one of them is the monument of Holmes; he lies buried at its root. Another quarter of a mile led us to a little bay on the solitary shore of the lake looking to the northwest. It is called the British Landing, because the British troops landed here in the late war to take possession of the island."

"On the mainland opposite stood a church with its spire and several roofs were visible with a background of woods behind them. 'There,' said one of our party, 'is the old Mission Church. It was built by the Catholics in 1680, and has been a place of worship ever since. The name of the spot is Point St. Ignace, and there lives an Indian of the full caste, who was sent to Rome and educated to be a priest, but he preferred the life of a layman, and there he lives on that wild shore, with a library in his lodge, a learned savage, occupied with reading and study.' You may well sup-



DeCROUPET IRON WORKS

Engineers, Fabricators & Erectors
of Structural Steel
and Miscellaneous Iron
Since 1873

ROYAL OAK, MICHIGAN

DEARBORN WELDING CO.
ESTABLISHED 1946

Specialists
In Steel Roof Decks
And Bulb Tee Rails For Roof Decks

6866 SPRUCE DRIVE, BIRMINGHAM, MICHIGAN
MAYFAIR 6-6536

R. E. LEGGETTE COMPANY
Established 1933

Acoustical & Building Specialty Contractors
ARMSTRONG Acoustical Products
SANYMETAL Toilet Partitions
CAFCO Sprayed Insulation and Fireproofing
ACCORDION FOLDING DOORS
MOVABLE OFFICE PARTITIONS
VIN-L-FAB Metal Wall Coverings

9335 St. Stephens St., Dearborn, Mich. LU. 4-2000

JACKSON, MICH.
P.O. BOX 461
STate 3-3989

SAGINAW, MICH.
P.O. BOX 604
519 LYON STREET
PLeasant 5-2057

Over 22,000 Architects Could Get Your Message

Now Available

THE ONLY COMPLETE UP-TO-DATE MAILING LIST* OF ARCHITECTS IN THE U.S.A.

Made from records at the source, the State Boards of Registration from all of the United States, and constantly corrected.

Excellent for reaching architects by direct mail—can use complete list or such States as desired.

$20.00 per M for addressing from plates on envelopes you furnish.

Prompt service from all new equipment.

FOR FURTHER INFORMATION
Inquire of

NATIONAL ARCHITECT, 120 Madison Ave., Detroit 26, Michigan

**While the information herewith is correct, we cannot guarantee 100% accuracy, as changes are occurring constantly.*

pose that I left a strong desire to see Point St. Ignace, its venerable Mission Church, its Indian village, so long under the care of Catholic pastors, and its learned savage who talks Italian, but the time of my departure was already fixed.

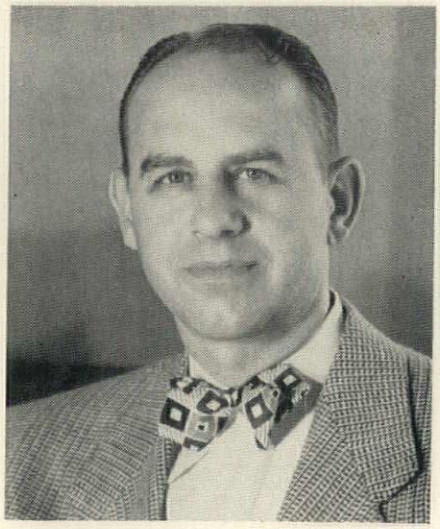
"But I should mention that before leaving Mackinac, we did not fail to visit the principal curiosities of the place, the Sugar Loaf Rock, a remarkable rock in the middle of the island, of a sharp conical form, rising above the trees by which it is surrounded, and lifting the stunted birches on its shoulders higher than they, like a tall fellow holding up a little boy to overlook a crowd of men—and the Arched Rock on the shore. The atmosphere was thick with smoke, and through the opening spanned by the arch of the rock I saw the long waves, rolled up by a fresh wind, come one after another out of the obscurity, and break with roaring on the beach."

"I spoke in one of my former letters of the manifest fate of Mackinac, which is to be a watering-place. I cannot see how it is to escape this destiny. People already begin to repair to it for health and refreshment from the southern borders of Lake Michigan . . . The world has not many islands so beautiful as Mackinac, as you may judge from the description I have already given of parts of it . . . I can not but think with a kind of regret on the time which, I suppose is near at hand, when it must yield to the common fate of American villages and improve, as the phrase is, and its wild and lonely woods will be intersected with high-ways and filled with cottages and boarding-houses."

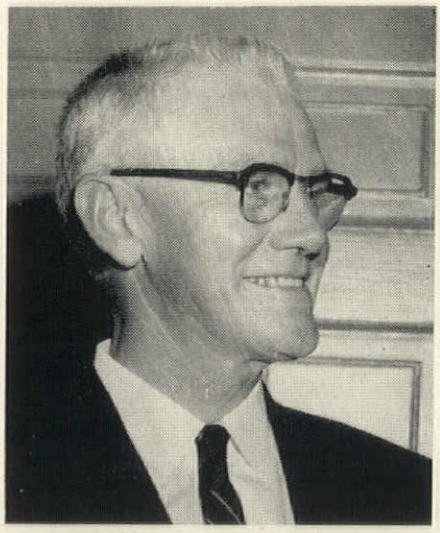
These excerpts are but a part of his fuller account of trips to Mackinac and the Soo. Of scarcely less interest are his letters about early Milwaukee and Chicago. We would like to suppose that he became so fond of Upper Michigan that he returned year after year. We can, however, find no reason to think he ever saw Mackinac again. The first letter in his book is dated 1834; the last is 1849. He did do enough travelling later, in Spain and other foreign lands, to publish two more books. He became editor of the New York Post, holding that position for many years, a fact very interestingly developed in Gene Fowler's currently popular **"Skyline."**

Bryant died in 1878, at age 84, his place secure in American literature. His predictions as to the future of the island have been realized only to a limited extent.

Shown on this page are some of those who will take part in the Society's Annual Midsummer Conference

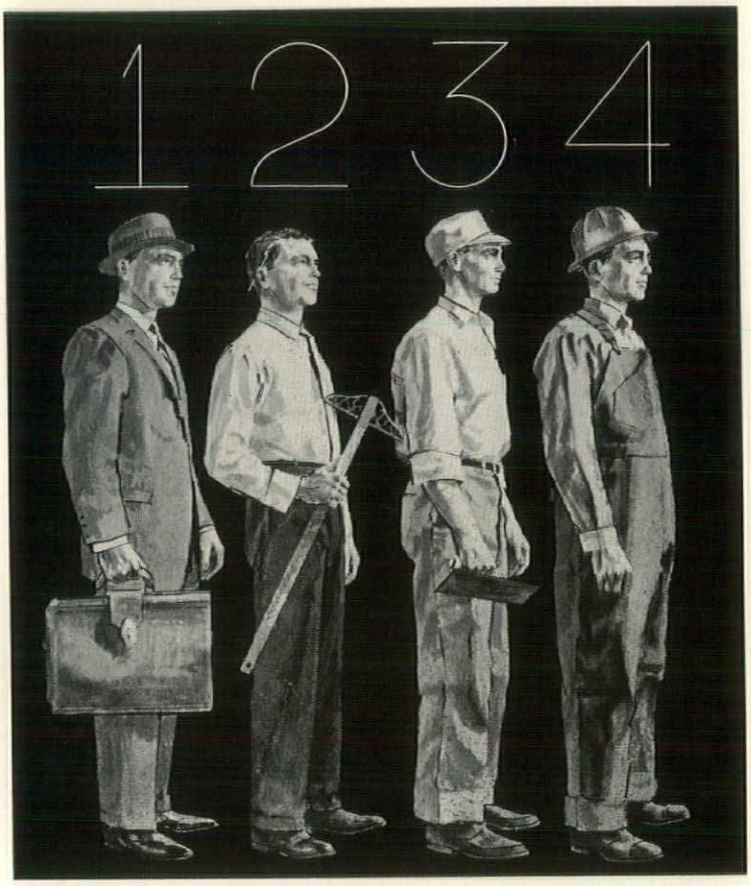


ADRIAN N. LANGIUS, F.A.I.A.



WILLIAM H. SCHEICK, A.I.A.

MARVIN J. BROKAW



services you can plan on

An important element in every Price precast concrete unit is the dependable service that goes with it. This includes sales representatives whose job is 90% service and 10% selling; engineers who are available to you for consultation without charge; production specialists who manufacture your products under optimum factory conditions and deliver when your schedule demands; and technicians who will install these products faster, reducing building time, and at lower cost. When the job depends on service, you can depend on Price.

PRICE BROTHERS CO.

12651 NEWBURG ROAD LIVONIA, MICHIGAN

SPITZLEY CORPORATION

1200 W. Fort St., Detroit 26, Mich. • WOodward 1-0840
2217 W. St. Joseph St., Lansing 4, Mich. • IVanhoe 7-5981

PLUMBING • HEATING • INDUSTRIAL PIPING • POWER PIPING • VENTILATING • AIR CONDITIONING

JCIC

By RICHARD F. BRENNAN

Architects, general contractors, electrical contractors and mechanical contractors of Detroit have joined hands to form a special committee to meet a vital task: The solving of major problems confronting the construction industry today.

Launched within the past year, the group is known as the Joint Construction Industry Committee (JCIC). Membership is composed of representatives of the American Institute of Architects, Detroit Chapter, Inc., (AIA); the Associated General Contractors of America, Detroit Chapter, Inc., (AGC); the Detroit Electrical Contractors Association, Inc., (DECA), and the Mechanical Contractors Association of Detroit, Inc., (MCAD).

JCIC officers are Chairman Robert F. Hastings of Smith, Hinchman & Grylls Associates, Inc. and Secretary William E. Stewart, who is also secretary of the Detroit AGC Chapter.

Representing their respective associations on the JCIC are: AIA—Chairman Hastings and Executive Secretary Talmage C. Hughes; AGC—Joseph W. Stifler, Thompson-Schmidt Co., and Stewart; DECA—W. Rodman Turner, Turner Engineering Co., and Secretary - Manager Perry T. Shilts; MCAD—Bruce Walker, Goss Mechanical Contractors, and Executive Secretary W. Harry Lane.

Three important subcommittees have recently been appointed, according to Chairman Hastings. These subcommittees and their members are:

Temporary Electric Subcommittee: AIA —John Andrews, Smith, Hinchman & Grylls, and James B. Hughes, S. S. Kresge Co.; AGC — Robert E. Johnson, A. J. Etkin Construction Co., and James Abbott, O. W. Burke Co.; DECA—Robert French, Southeastern Electric Co., and G. Donald Gray, Gray Electric Co.

Temporary Heat Subcommittee: AIA—James H. Livingston, Smith, Hinchman & Grylls, and Carl A. Scheuffler, Detroit Board of Education; MCAD — Edward Green, John E. Green Plumbing & Heating Co., and Lane; AGC—Gilbert Diefenbacher, Walter L. Couse & Co., and Robert J. Spiegel, Palmer-Smith Co.

Clean-Up Subcommittee: AIA—Arthur F. Bassett, Albert Kahn Associates, and George Craven, Jahr, Anderson, Machida Associates; DECA — Lester Holt, Hamill Electric Co., and Robert Hydon, Hydon-Brand Co.; AGC—Anthony Walters, Darin & Armstrong, Inc., and Richard Brennan, the Brennan Co.; MCAD—Edward Glanz, Glanz & Killian Co., and Lane.

NOTE: The bidding plan outlined herewith is being tried only on an experimental basis. It is an interim plan as an effort to solve one of the problems of the building industry. Initially, it is being applied only to the mechanical and electrical trades. It may or may not be extended to other trades. Before the plan can be officially adopted it will have to be submitted to the various groups having representation on JCIC. We solicit your cooperation by suggested changes for the plan's improvement.—Robert F. Hastings, FAIA, Chairman, JCIC.

Believing that the industry is best equipped to solve its own problems, JCIC has developed a 24-Hour Bid Registry Plan designed to improve the method of taking bids and awarding contracts.

Improvements in bidding procedures was one of the prime objectives of the J.C.I.C. from its beginning in September, 1960. Organized at the request of The Associated General Contractors, Detroit Chapter, Inc., the J.C.I.C. also has representatives from the American Institute of Architects, Detroit Chapter; Detroit Electrical Contractors Association and Mechanical Contractors Association of Detroit. Subcommittees have been appointed to study such matters as Clean-Up, Temporary Heat and Temporary Light. However, the major objectives remain in the hands of the J.C.I.C. itself.

The A.G.C. representatives submitted a bid registry plan patterned after one that had been used in Cleveland, Ohio on a project for John Carroll University. Since the first submission of this plan to the J.C.I.C. at their November, 1960 meeting, it has been revised three times to date. Although the plan is not held out as the "cure-all" or perfect solution, it is an honest attempt by those within the industry to do something positive toward improving bidding conditions instead of sitting back and engaging in useless name calling. The plan was used recently on the Lansing-Reilly Hall Project for the University of Detroit by Harley, Ellington, Cowin & Stirton, Architects and Engineers. From all reports it had fair success. Undoubtedly there will be areas which may need change to improve the plan.

Recently the J.C.I.C. invited representatives from the four largest architectural firms in Detroit to attend a meeting for the purpose of discussing the merits of the bid registry plan. Keen interest was shown by these representatives and they agreed to consider using the plan on one or two projects out of their offices in order to obtain further trial examination of the plan. It is sincerely hoped that these architectural firms will give the plan this increased exposure so that its merit can be more realistically appraised.

The proposed plan may not be the solution to the bidding procedure problem. If it isn't, this is what the Joint Construction Industry Committee wishes to know so they can direct their efforts to a different approach to the problem. If this is the solution, the J.C.I.C. wants to lend impetus to promoting the industry-wide use of the plan. It is as simple as that. This is not an attempt to be "do-gooders," gain recognition, or revolutionize the industry. This is a joint effort by representatives of four major segments of the construction industry through their respective Associations. The J.C.I.C. has expended its energies on hard work, rather than fanfare and publicity. The latter will come in due course when there is something to publicize.

The Construction Industry is a great industry—second to none in size as a single industry. It has been good to many people and it is the responsibility of these people to come to its aid when it needs help and no one will debate that it can use some help in the Detroit area. To use a well-worn cliche, "it is time to close ranks" and work together in solving industry problems. The J.C.I.C. expects and welcomes criticism of its efforts but it will give little attention to the critic whose only opposition to the plan is that it is a change from the present methods of bidding. Progress in the Construction Industry or any industry only comes through change.

Whatever success the J.C.I.C. obtains can be credited to the members of the four associations represented on the Committee. It is only through the willingness of the members of these four organizations to seek solutions to these problems that there can be any accomplishment. While others have stood by and complained of their plight, the J.C.I.C. has at least taken a step forward by their efforts.

There will be those who will offer nothing but the criticism that steps are not taken fast enough. But the majority of those in the industry will appreciate that the problems did not occur overnight. With earnest cooperation by everyone without too much impatience, these problems, like all problems, can be solved and the construction industry can again reach the heights it once attained.

It would behove every reader to do a little soul-searching with himself and ask these questions:

What part did I play to contribute to present conditions in the industry?

What have I done lately to help correct these conditions?

Use **Steel** *For Modern Construction*

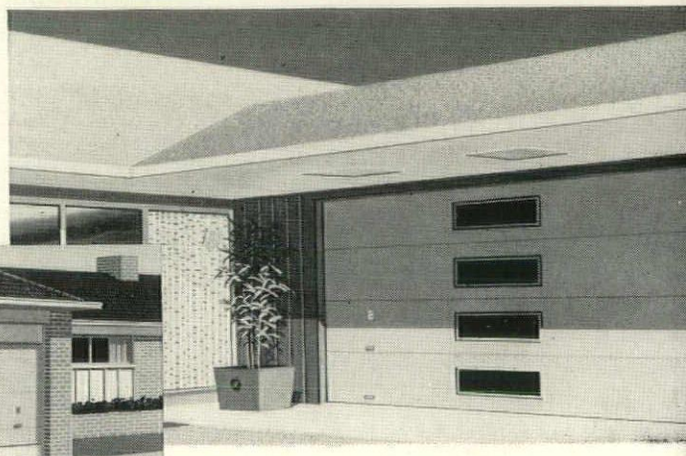
Acorn Iron Works
Baron Steel Company
Calumet Structural Steel Co.
Chapper Iron Works
Davis Iron Works
Douglas Steel Fabricating Co.
C. J. Glasgow Co.
Haven-Busch Co.
Macomber Detroit Sales Co.
The R. C. Mahon Co.
Marine Steel & Welding Co.
Overhead Conveyor Co.
Paragon Bridge & Steel Co.
Taylor & Gaskin
Unit Steel Corp.
Whitehead & Kales Co.
Wiltse Bros.
Yeager Bridge & Culvert Co.

GREAT LAKES FABRICATORS ASSOCIATION

10600 Puritan Avenue • Detroit 38, Michigan • DIamond 1-5811

NEW **from CRAWFORD**

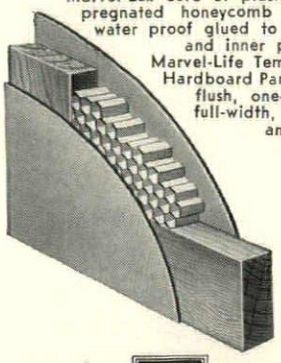
ALL-FLUSH *Stylist*



a beautiful de luxe door for single or double garage at ordinary price

1. ALL-FLUSH, ONE-PIECE, FULL WIDTH PANELS outside *and* inside; wonderful for colorful decorator effects. All Crawford Marvel-Life Hardboard, weatherproof, almost indestructible.
2. GENUINE REDWOOD inner frame.
3. MARVEL-LUX HONEYCOMB CORE of plastic impregnated fiber, waterproof bonded to frame and panels. Strength without weight. Fire-resistant. Insulator.
4. STEEL REINFORCEMENTS on double doors.
5. SECTIONAL CONSTRUCTION; the best. Glides up and over; no swing-out, no projections.
6. CRAWFORD MARVEL-LIFT MECHANISM, world's finest; two million in daily use. Or, Crawford Budget Mechanism.
7. Push-button control from your car by G.M. Delco-matic Garage Door Operator (optional), the ultimate in modern convenience and comfort.
8. Sold, installed, guaranteed, serviced by the famous Crawford organization; your assurance of satisfaction.

Frame of genuine redwood; strong, light, durable.



Marvel-Lux core of plastic impregnated honeycomb fiber, water proof glued to outer and inner panels. Marvel-Life Tempered Hardboard Panels all flush, one-piece, full-width, inside and out.

Here's more door for the money than ever before—beautiful, de luxe, full-width, one-piece panels and real custom construction for strength and durability. The trapped-air insulation in the honeycomb core makes this a good door for attached garages under living quarters. And, it is fire-resistant. In section, the Stylist has about half the bulk of a conventional door, a feature which will appeal to many architects. Standard models are plain but any desired arrangements of windows in practically any shape can be supplied. Available with nylon tire rollers for extra quietness. Your local Crawford distributor will gladly show you a cut-away section of the Stylist. Look for him under DOORS in your classified phone book. Crawford Door Co. 20263 Hoover Road, Detroit 5, Mich.

Crawford *MARVEL-LIFT* GARAGE DOORS

GM GENERAL MOTORS DELCO *Delco-matic* GARAGE DOOR OPERATO

Fire Safety

An Address on "ARCHITECTURAL DESIGN AND THE FIRE PROBLEM," before the New York Chapter, Society of Fire Protection Engineers, New York, N. Y.

By JOHN C. THORNTON, A.I.A.,
Chairman, A.I.A.
Committee on Human Safety

Four years ago Mr. Glenn Stanton, F.A.I.A., then President of The American Institute of Architects, became concerned about the fire problem and the large loss of life in buildings, and he was particularly interested in automatic venting, because a large number of deaths are from the gases of combustion. The A.I.A. Board of Directors decided to appoint a small committee to study the problem. The duties of the committee were "to study the means available to the architect in the planning of structures to prevent the injury and loss of life of human occupants, and immediately concentrate on the hazards arising from fire."

As the architect for a large public service corporation, I had always considered that I was safety minded. I had worked on safety code committees and had always tried to be mindful of safety in design. As our studies of reports and other literature on the subject progressed, I came to the conclusion that I, as well as most of the profession, did not know enough about fire safety in design. I now think that this applies to everyone of our members, with no exceptions. It was our duty to remedy this condition among our members, insofar as possible. We have endeavored to do just that.

We have written four reports, including one now ready for submission. The A.I.A. Board of Directors has seen fit to have these published for our members. The second report, in 1956, required 10,000 reprints to take care of requests.

Until recently we had not known whether or not we were getting our message across. We were rather discouraged, but in the last few months we have noted more and more concrete evidence that our membership is becoming definitely interested in the problem.

An Architect who realizes there is a problem will do something about it. Our problem was to get architects to read our reports. We stopped being too nice and resorted to that old trick of placing a burr under the saddle. If it is well placed at the beginning, it works wonders. I have a few along with me today!

As we continued our studies, we found that a great deal was being done toward saving property but that the problem of saving life had not received the attention it should have had. Our studies have been on safety for human life. We, of course, recognize that every fire endangers life, and designing to make fire-fighting less dangerous is also our duty. Although the fireman is dedicated to saving life and property, his own life is no less precious.

We are living in an age in which the tempo of changing conditions is very rapid. Altered needs bring about changes in design of buildings and often introduce hazards that are not recognized by designers. In some eras changes came slowly, but today design is changing at a pace hitherto unknown.

The classic folly of design was the extension of the open stairway of the low building to the multistory, as structures rose in height. These furnished perfect chimneys for the spread of fire and smoke, but nothing was done until many lives were sacrificed.

We think we have learned the lesson of open stairways, but we have not. We prohibit them in new buildings of over a certain number of floors but older hotels and office buildings throughout the country still have them. It is unlawful to cause one to be burned to death or asphyxiated in a new structure—but perfectly legal to in an old one.

Our codes do not require closed stairways in two-story buildings, but an open stair in a two-story structure can and has caused deaths very quickly. Fire in the lobby of a small hotel in a western city killed several men in their rooms on the second floor. It was not a large fire but there was considerable smoke. A closed stair or automatic vents would have saved those lives.

We have found that codes do not properly protect human life, and never can. They are minimum, often influenced by pressure groups, and cannot keep up with rapidly changing conditions. We have urged our members to think beyond codes as they design.

We wonder why builders of a few years ago did not realize the hazard of open stairways. A little thought would have told them the dangers. However, we are doing equally foolish things today. We have the new toy, air conditioning. Many of these systems provide the finest possible way to spread fire and smoke throughout a building faster than via the open stairs that took years to eliminate in new buildings. When we first started to talk about this hazard we did not have cases. Now we do. We will refer to this later.

With the advent of modern lighting and ventilation we have blithely left out windows, being apparently unaware that windows serve purposes other than giving light and air. Windows are often the only means of escape or of rescue.

As we became aware of the hazards of small windows, we looked for them as we drove from place to place. Last summer, on a 300-mile trip, we counted about a dozen modern schools with window ventilators too small for escape. We know of school fires where regular avenues of escape were cut off and only those who could get out the windows lived. Window manufacturers are giving no thought to human life when they put sash on the market that offer no means of escape.

We also have the fad of putting in bedrooms high windows often too small for escape, and with the sill so high that to try to escape would place the occupant in the smoke zone, which can be fatal. A year ago we tried to bring this to the attention of home builders. They wanted to know how many people had been killed because of such windows. We had no data then, but we do have cases now. The coroner will become busier and busier. Yes, we must sacrifice lives before we do anything, although the hazard is perfectly obvious. What better firetrap could we devise than to place the heating plant in a closet off the bedroom hall and install windows too small for escape?

Another result of mechanical ventilation is the fixed window. While it can be broken to fight fire, it presents a life hazard, especially if the air conditioning system is forcing smoke into the room. We have no quarrel with fixed or small, high windows if there is an outside door or another window adequate for escape.

We have reported on windowless buildings several times, bringing out the hazards they present. At a meeting of the Southeastern Association of Fire Chiefs this problem was discussed thoroughly and I learned that they were as much concerned over the problem as I am. Cases were reported where they could not reach the fire and there would have been no chance of rescue if humans had been in the buildings at the time. False fronts also came in for criticism. They usually have no windows, furnish a means for fire to travel and put an extra strain on buildings.

Along with windows we should mention doors. The modern tendency toward the open plan does not take fire safety into consideration. It does not take much of a fire to produce sufficient gas to kill. The low partition is in the same class as the doorless opening but is a worse hazard. We can put fire and smoke doors in buildings but they can be nullified by that nefarious thing called "a wedge." I have seen them in hotels and office buildings throughout the country.

We have read of cases in commercial structures where rear doors have been made so strong to keep out burglars that by the time firemen got through them it was too late to save the building. These are somewhat like the barred windows that have caused so many

CONVENTION ARENA & COBO HALL

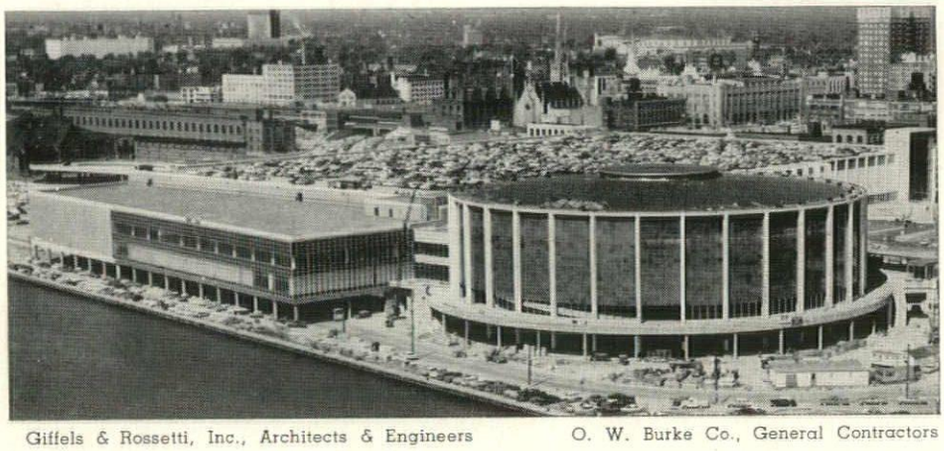
PAINTING BY

AUSTIN'S

Jobs of Distinction Since 1888

PAINTERS

Michigan's National Painting Contractor



Lens-Art Photo

Giffels & Rossetti, Inc., Architects & Engineers — O. W. Burke Co., General Contractors

SOME OF AUSTIN'S CURRENT JOBS NOW IN PROGRESS

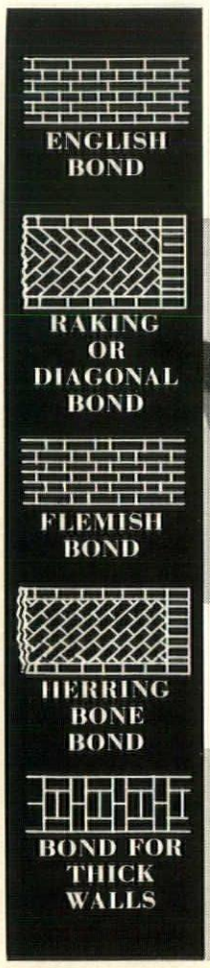
WESTERN ELECTRIC CO.
Oklahoma City, Okla.
FORD MOTOR CO. GLASS PLANT
Nashville, Tenn.
B. F. GOODRICH CO. TIRE PLANT
Ft. Wayne, Ind.
WESTINGHOUSE ELECTRIC CO.
Muncie, Ind.
PARKE-DAVIS CO.
Holland, Mich.
REMINGTON-RAND UNIVAC DIV.
Morristown, Penn.
MISSOURI SECURITY PRISON
Moberly, Mo.

PAINTING . . . DECORATING . . . WALL COVERING . . . SAND BLASTING

LIQUID TILE

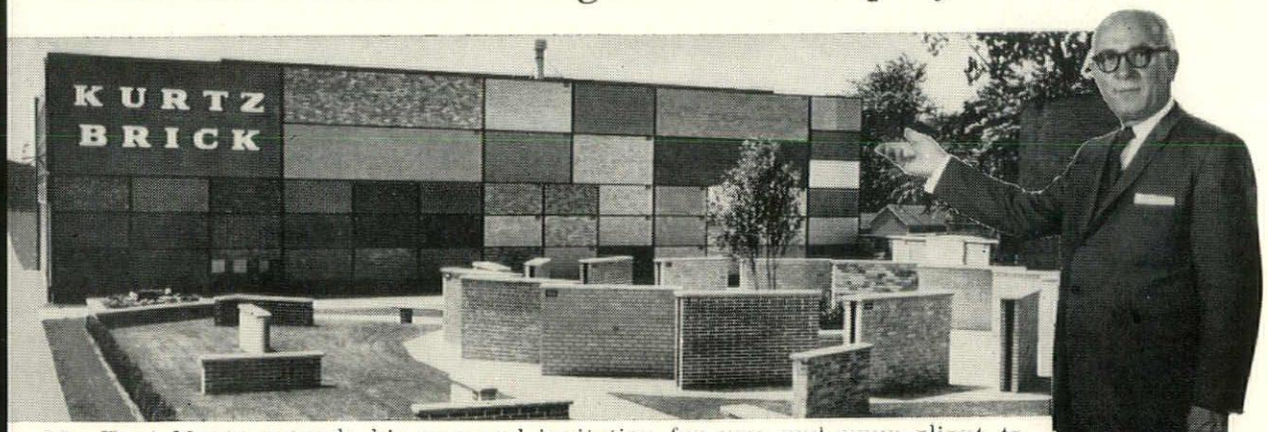
Exclusive Applicators

DETROIT: 4628 St. Aubin Ave. • TE 1-7055 — **FLINT: 1532 N. Saginaw St. • CE 5-2131**



CHOOSE YOUR KURTZ BRICK FOR "BUILDING BEAUTIFUL"

from the finest and largest brick display in the world



Mr. Paul Kurtz extends his personal invitation for you and your client to browse through this extravaganza of the finest in building brick. You will find it an educational and pleasing way to select your brick.
If you wish a guided tour through this unique display, call Mr. Kurtz.
YOU'RE ALWAYS WELCOME AT THE

KURTZ BRICK CO.

14183 WYOMING — TExas 4-4411 — DETROIT 38

4 Blocks South of John Lodge X-way, Wyoming Exit

deaths. A recent case in England awakened them. With a modern, supervised alarm system, barred doors and windows are not as necessary and can result in loss of property and life.

Modern lighting, ventilation and heating have caused us to make changes in design in other places. The results are not always good if we consider the fire hazards introduced. With modern heating we now have many basements with no access except by means of an inside stair which often cannot be used; no way to exhaust smoke from that location; and frequently no way to reach the flames. We have advised a door directly to the outside from all basements, and other means of venting smoke, if possible. Skylights are eliminated from roof and no alternate means of venting provided. Opening a modern roof for venting takes precious time.

We think that we are a civilized people; consequently, we look upon human sacrifice with horror. We profess to consider human life sacred, yet what do we do? In one year we needlessly sacrifice more human lives than is done throughout many years by the "uncivilized" whose practice is deliberate. I may not be able to prove this, since cannibals, etc., do not keep accurate records. We, however, do have records of our human sacrifices. Why does this happen? There are several reasons.

The American people wait for many to lose their lives before doing anything; then there is a great cry that laws must be passed, someone must be blamed. It is soon forgotten. New laws are enforced in some areas but not in others.

We are also willing to take chances, especially with other peoples' lives. We are too optimistic, thinking, "It cannot happen to us." One of our problems is to save people from themselves. We do not profit from experience, although we like to think we heed statistics. We soon forget lessons that should stay in our memories. A woman died in Michigan recently, having been horribly burned because of smoking in bed. She had been burned once before but did not heed the warning.

Our greatest fault is in not using the brains God gave us. If we used them, we might easily see hazards and correct them. Laws of physics have not changed. We know how fire and gases of combustion act and how people conduct themselves in panic, but we have ignored the knowledge we had.

We have too many buildings where exit stairs from upper floors are not true exits. In place of the exit being to the out-of-doors, it is into a space such as a hotel lobby which can easily be filled with fire and smoke. Such lobbies are often surrounded by shops filled with combustibles.

We should mention designing to lessen the chance for panic. Panic is a beastly thing, a state of mind which makes an animal out of man, caused by fear that escape is impossible. If a building is so designed that occupants have a feeling of security, that escape is easy, there is less chance of panic. Total darkness can cause it; therefore, there should be emergency lighting for avenues of escape where people gather. Ample exits, especially the door they enter, and avenues to them reduce the hazard. Also, knowing that the building is sprinkled, that the contents are not highly flammable, may reduce the chance for the black headlines. Designing to lessen the chance of panic is one of the ways whereby the thoughtful architect can make a contribution of safety to life. This is needed in churches, especially those which persist in having candlelight services where open flames are carried around the sanctuary. It took me several years to eliminate it in my own church. I am not referring to fixed candles at the altar. Churches have a responsibility for the temporal, as well as the spiritual, welfare of those who attend their services.

Panic is the great hazard in a crowded store on the smell of smoke or the cry of fire. In most stores the stairways, both fixed and moving, are in the center of the building and fleeing occupants must pass quantities of flammable merchandise to escape. As we mentioned before, exists are not enough; there must be safe means of reaching them. The problem is increased by air conditioning, which is often as bad as an open stairway. We are not happy about open moving stairways protected only by sprinkler heads. Hazard from fire may not be too great but smoke can get through before the heads fuse, and this may cause panic. Such openings also enhance the chance of too many heads fusing.

There is no argument that sprinklers are the first line of defense against fire. We all feel safer when we see them, especially in hotels, and we sleep with greater peace of mind. Many hotels in this country are more or less firetraps. Those of fire-resistant construction are not expected. It is important that when we install sprinklers we do not let down the bars on other safety measures. One of your members has said that all that is needed for a smoky fire is automatic sprinklers, plus a fire department. He was thinking only of property loss. I am sure that the rest of you take a broader view of the problem. We must never depend on sprinklers alone when human life is at stake. They can fail—valves have been closed, too many heads have fused and supporting steel has failed. Protection of human life is our greatest responsibility.

We would like to see sprinklers installed in basements of homes on city or private water systems at a reasonable cost, because most fire deaths occur in residenital occupancies. In talking to home builders I find an interest, but there seems to be none among the sprinkler people. A good burr is needed here.

While working with the Home Safety Conference of the National Safety Council, we became interested in home fire alarm systems at a cost within the reach of the average home owner. We found such systems. I put in an adequate system in my own home at a cost of less than $75.00 for material. The home system has been given a setback by the high-pressure, horror methods of some companies who ask a high price and put in inferior products. We understand the government has investigated this practice. Alarm systems are not new. They are as old as life itself. The Creator, in His wisdom, put an alarm system in every living creature. There is no gong, but pain will make us react faster.

In new homes it is simple to install a system; nor is it too difficult in many older homes. We had an interesting case in Michigan recently. A mother, awakened by a homemade alarm which she did not know was in the house, escaped with her children just in time. A former occupant had installed the alarm.

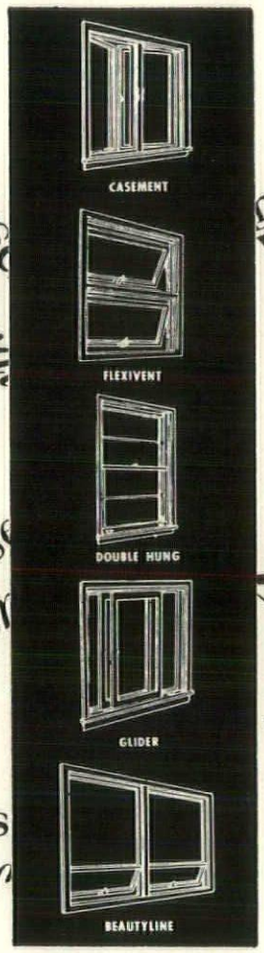
In a recent article on Home Fire Safety, we made the remark: "Why not spend a few dollars so that you may enjoy a little longer the kitchen gadgets that cost a great deal more?"

We are concerned over totally enclosed courts. They not only help spread flames but there is also little chance of rescue from windows. A window that a fireman cannot reach is not a means of rescue.

Lightning is causing fires, especially in churches. A recent costly church fire in a rural area taught us that lightning is inconsiderate. It does not wait for the structure to be completed and the lightning protection to be installed. It is needed during construction. Another fire taught us that protection is needed for metal structures on buildings, low ones not excepted.

One of our first studies was venting of buildings, in most cases of fire deaths, they came from the gases of combustion before the flames reached the occupants. Since the G. M. Livonia fire a great deal has been done on venting, but mostly in manufacturing plants. We have come to the conclusion that automatic venting should be considered in the design stage of all buildings, especially where people sleep or gather in large numbers. We hope that th NFPA Committee which is doing such fine work on venting of industrial buildings will soon turn to venting for safety to life. I have talked over the problem with many fire officers throughout the country and have found but one who is opposed, although there is a difference of opinion as to how it should be handled. The one case was a fire marshal who told an architect who planned fire curtains and automatic vents in a hazardous occupancy to forget it—that they would punch their own holes. I doubt that many fire departments are so fast that the chief would

Andersen Windowalls



ANY WAY YOU LOOK AT IT ANDERSEN (WOOD) WINDOWALLS ARE BEST

Andersen Windowall quality is unsurpassed. It begins with the use of selected pine, treated to assure long life. Andersen designs are equal contributing factors to the satisfaction you enjoy. There's a style for every room and location providing vision, beauty of line and mechanical operating features that will appeal to you.

PUBLIC SHOWROOM
2127 FENKELL AVE.
DETROIT

SEE YOUR RETAIL LUMBER DEALER, FIRST.

KIMBALL & RUSSELL INC.

WHOLESALE SASH AND DOOR DISTRIBUTORS

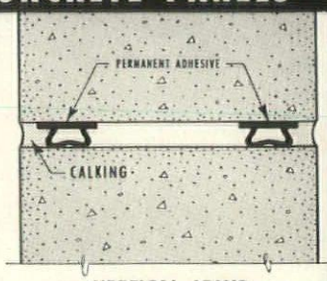
2127 FENKELL AVE. DETROIT 38, MICH. UN. 1-3480

SEE THEM AT SHOWCASE, INC.

RUBBER or VINYL SEALS and GASKETS

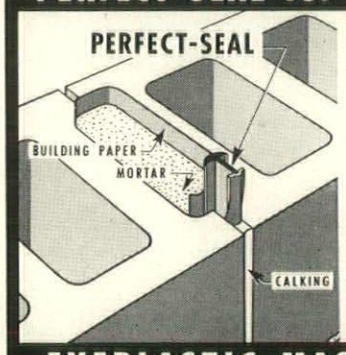
for PRECAST CONCRETE PANELS

Williams Panel Seals (Pats. Pend.) were developed especially for use in vertical and horizontal joints of precast concrete wall panels . . . they are extrusions of expanded, closed-cell Neoprene Rubber. This closed-cell material, and the hollow-core design, provide the properties which assure a positive pressure-contact seal in panel joints under all conditions—each type of seal readily compensates for variations in joint width, irregular joint surfaces and erection adjustments.



VERTICAL JOINT
6" Precast Concrete Panel

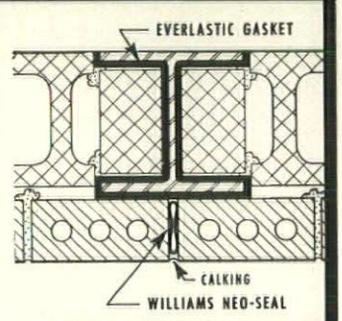
PERFECT-SEAL for CONTROL JOINTS



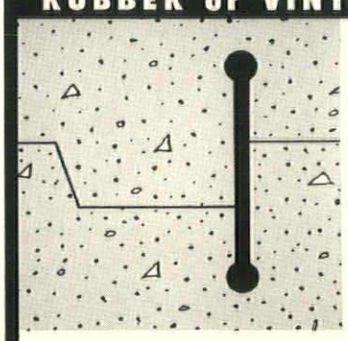
Williams "Perfect-Seal" (Pat. Pend.) is a specially designed seal for use in Mortar-Keyed Control Joints . . . it provides continuous four-point pressure-contact sealing which keeps moisture out of joints and prevents air passage. The T-Section is a high-grade rubber compound; the cross-sealing member at the base of the "T" is a strip of readily compressible, non-absorbent, expanded closed-cell Neoprene Rubber—it provides an effective pressure-contact seal directly behind the calking.

EVERLASTIC MASONRY GASKETS

Everlastic Masonry Gaskets are a readily compressible, nonabsorbent Elastomer which is impervious to water and inert to heat, cold and acids. In masonry joints, they permit linear expansion, and seal the joints against moisture penetration which causes frost damage. Everlastic Gaskets should be used between sill and coping stones, stone or prefab metal wall panels, and to isolate and cushion all steel or concrete columns to permit normal movement without damage to masonry walls.



RUBBER or VINYL WATERSTOPS



Williams Waterstops are made from Natural Rubber Stock and designed for maximum effectiveness in any type of cast-in-place construction joint. They will bend around corners, and will not crack or tear from shear action. Tensile Test: 3990 lbs., Elongation Test: 650%. Available in rolls up to 80 feet in length. Molded union and junction fittings available. Williams Waterstops can be furnished in Vinyl or Neoprene for industrial uses where resistance to oil or other injurious wastes is desirable.

See Sweet's Files, or Write for Information.

WILLIAMS EQUIPMENT and SUPPLY CO.

486 W. Eight Mile Rd., Hazel Park, Michigan

dare send his men on a metal deck to punch holes. It does not take long for an unvented steel deck to fail. If we had many such remarks we would soon think, "What is the use?" I would like to add that the International Association of Fire Chiefs has been a great help to our committee from the very beginning of our studies. I also wish to ackowledge valuable aid from NFPA, especially Mr. Bugbee, The Board of Fire Underwriters, and many others.

Modern manufacturing methods have called for large areas without the attendant fire hazard being considered. We have brought this to the attention of our members not only for manufacturing plants but also for other occupancies.

Building materials present one of our most serious problems. Manufacturers put new materials on the market without knowing very much about them, especially how they act under fire conditions. In my practice, I was fortunate to have the services of a research laboratory. After testing a great many materials, we came to the point where we did not believe advertisements, or salesmen's statements. Very few architects have the advantage I had and cannot be sure of the materials they specify, for, obviously, they cannot send all those they question to a laboratory. Our Committee has advocated an act to make it mandatory on manufacturers to put the flame spread on materials going into buildings. This would produce two results: architect and the general public would know what they are using and it would give the manufacturer an incentive to improve his product. The Food and Drug Act cleaned up that mess; we need something to clean up the materials hazard. The most we can do now is to demand flame-spread information before specifying a material. Think what would happen to paints if this were required!

The term "fireproof" has given a false sense of security. You can be killed by the gasses of combustion just as quickly in a fireproof, or rather a fire-resistant building, as in any other. I like the term "fire-safe," which means you have a chance of survival whether the structure is fire-resistant or not.

This false sense of security is responsible for letting down the bars on many safety measures. We hear "The building is fireproof, isn't it?" Though the structure may be of fire- resistant materials, it can make an excellent stove and there is always fuel present. On second thought, it is not a good stove. It has no vent. Remember the old base burner? Our fathers knew more than in the pipe always had an opening so gases would not kill. They never put a board on the chimney.

Plywoods that delaminate under heat furnish the worst kind of kindling and there are some pressed boards that carry fire faster than you can run. In the old days timbers were heavy and did not burn rapidly. Now, some of our construction cuts down the sizes of members until it seems like a race to see how much kindling we can use.

From our studies and observations, we have come to the conclusion that conservation of property has been the principal aim in fire protection. It certainly is in many quarters. We believe, however, that the pendulum is swinging somewhat toward safety to life. We were pleased to note that in your information to applicants for membership the first item is protection to life (including exits). This, of course, should be your first thought. I know that some clients are only concerned with property loss and insist that nothing be done beyond the requirements of the code. In this respect your problems are similar to ours. It is not enough that we know what should be done; we must also do a selling job. A case of a government agency came to my attention some time ago. It would not spend the money for automatic controls on the air conditioning system to prevent smoke from being spread throughout the building, although the architect advised it as it was a large building housing many people. It was perfectly all right to spend the money on marble.

The problem is to educate the public and I think that it is a part of your duty. We are trying to get our members to do it. In our reports we often advised architects to warn clients of hazards that should be watched.

In your reference to life safety you mention "exits." Just "exits" is not sufficient. Location is important. Also, access to the exit is just as important as the exit itself, as we mentioned before. An exit that cannot be reached is of no value and gives a false sense of security.

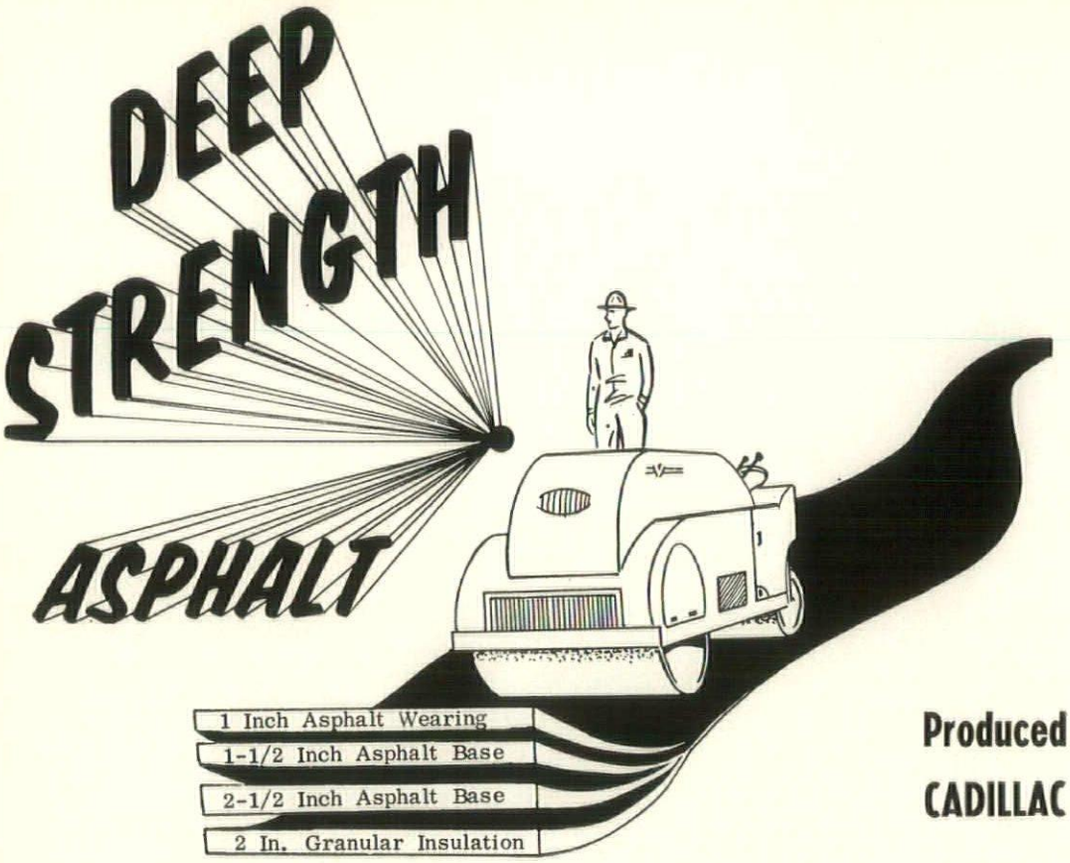
About the worst example of poor exit facilities may be found in the modern Supermarket. Total width of doors may meet the code but most of the exits which are counted are not exits at all when it comes to an emergency. There is usually no hardware for opening the entrance door from the inside and it opens in, yet it is counted. The check-out system with aisles choked with carts is a trap in a crowded store. Rear exit is through the service section where 79% of fires originate. Lights may fail because the electric service section usually enters here. Conditions are much worse than those at the Baltimore Oyster Supper Fire. These are but a few of the hazards of this occupancy. We have plenty of warning but will do nothing until some day there will be a flash fire that will take many lives. Then we will have statistics and may do something.

Architects have been severely criticized of late for church design that aids the spread of fire. Constructive criticism is a good thing and we have used this criticism to motivate our members to design their buildings as firesafe as possible. Practically all criticisms of architects have been on items brought to the attention of our members in our reports. Many architects are fire-conscious and are doing excellent work; others need the education we are trying to furnish.

Criticism always attacks a group as a whole. To a marked degree, modern design is eliminating enclosed spaces, thus cutting down avenues through which fire may spread. Lower ceilings in sanctuaries are becoming more common, which will make fire easier to control. What we must watch are the materials of which we spoke.

When it comes to criticism it should go a great deal further; for example, engineers shold be chided for their designs of "smokalating" systems—more commonly known as air conditioning. Last week I noticed an article blaming a hospital system for spreading disease from the pathology laboratory to operating rooms. You have been guilty of waiting for a catastrophe, such as the Livonia fire, before realizing things that should have been obvious long before. The Brooklyn waterfront fire taught several lessons which fire protection people should have recognized previously. Insurance companies are far from guiltless when it comes to protection of life. Classified lists of fires stress monetary losses but seldom include lives sacrificed. Fire insurance policies contain nothing on life hazards while inspection lists usually ignore life safety measures. I was recently told of a large insurance company that required that attic vents close in case of fire. This is a way to kill people in the rooms below by building up smoke pressure. Companies could do much more to make hazardous design undesirable and combat the feeling among owners that "It's insured, so why do more than is required by law?" Life insurance companies have not taken the interest in fire-safety that they should, possibly because a matority of fire deaths are among those who are not insured.

We in The American Institute of Architects have been trying for four years to criticize ourselves in order to do a better job. It would be a good thing for each organization to do a little soul-searching to see if it cannot do better. Records indicate that it is needed. We are making progress, for our members are realizing more than ever their responsibility for fire safety. We cannot do it all; others have responsibilities also. We must all think beyond codes and the saving of property. We must work for the education of the public — impress upon everyone that there are things that can be done to save human lives. If building owners become cognizant of their responsibilities and that it can happen to them, our work will be easier. Many things can be done that need not be expensive. A door can save lives, and costs very little. The greatest contribution that we can make toward life—safety from fire is to use that portion of our superstructure called "the brain" a little more. Let us try to foresee hazards and not wait, as we have done in the past, for statistics to motivate us.



Produced By
CADILLAC ASPHALT PAVING CO.

12490 EVERGREEN ROAD • DETROIT 28, MICHIGAN • VE. 5-0600

MEMBER
MIA
MARBLE INSTITUTE OF AMERICA, INC.

WOLVERINE MARBLE CO.

DOMESTIC & IMPORTED MARBLES FOR ALL FINE BUILDING PROJECTS

Service Since 1923

OFFICE & FACTORY
14269 FLEMING AVE.
AT DET. T. R. R.
DETROIT 12, MICHIGAN
TOwnsend 8-7113

BENJ. A. CAPP
President

GLANZ & KILLIAN CO.
Mechanical Contractors

✓ PLUMBING
✓ HEATING
✓ AIR CONDITIONING
✓ PROCESS PIPING
✓ FIRE PROTECTION
SPRINKLER SYSTEMS

1761 West Forest Avenue • Detroit 8, Michigan • TEmple 1-7820

Shopping Center Electric Signs

By CHARLES N. AGREE, AIA

The needs of the merchants in a shopping center for adequate, integrated promotional activity and the special site and design requirements of the center combine to produce a new medium—the independent shopping center sign. Usually erected free-standing, it is positioned at the point of greatest visual impact, with a special eye-arresting attraction for passing and approaching traffic.

Such large signs effectively combine the advantages of a large identification unit bearing the group name of the center, with large-size interchangeable lettering for special messages. This latter development is one that alert merchants have learned from some of the world's most enterprising advertisers — the motion picture theatre operators.

These outdoor signs provide the opportunity for a frequent change of pace and impact in the advertising message, and make the outdoor electric sign an effective competitor with the far more transient broadcast and printed media. Any business firm planning a long-range advertising program may well study the Comparative Circulation Cost Table, with its striking comparisons in the final column showing cost of each medium per 1,000 circulation.

Unlike other media, signs are an actual part of the total center or building project, not just an advertising accessory. They should be planned from the beginning and considered an essential phase of the development.

Planned signs in a shopping center have a number of significant inherent advantages, among them:

(1) A well-designed sign will serve to enhance the appearance of the property, express the character of the enterprise, and add site prestige.

(2) The sign serves the key function of identification of the business location or center.

(3) 24-hour impact is available through planned illumination.

(4) The basic message in the interchangeable letters demands brevity—and resultant high impact effectiveness for the passing traffic in the brief moment of exposure.

(5) The sign — combining permanent name and changing lettering—has high repeat value.

(6) Signs are placed where they are most effective—at the point of purchase, directed to the market with the highest potential for the center.

(7) The combination of three powerful factors — color, motion, and light — assures a high degree of permanence of impression.

(8) Rental or space charges, necessary in any other medium, are in effect zero, since the sign is built-in at the site.

With the new development of interchangeable commercial signs has come a new concept in service. Maintenance may be handled by a suitable contract with the installation company, so that the owner is relieved of any duties in this connection.

Adequate maintenance for good appearance as well as efficient operation is essential, and the sign people themselves work to observe high standards, realizing that a poorly maintained sign is a reflection on their own business in the eyes of the public.

COMPARATIVE CIRCULATION COST

Medium Considered	Program Proposed	Per M Gross	*N. A. C. Factor	Per M Effective Advertising
Magazine	1 p. B & W	$3.10	3.5	.885
Newspaper	1 p. B & W	4.98	3.5	1.42
Outdoor	24 sheet	.023	.3	.077
Television	½ hr. evening	5.00	3	1.66
Radio	½ hr. evening	8.70	3	2.90
Electric Signs	Spectacular	.208	.4	.52
Electric Signs	Store Front	.008	.4	.02

*N. A. C. Factor—Net advertising circulation—the over-all effectiveness

Allied Arts Forum

The following is a letter received by the Allied Arts Committee from a Chapter member, commenting on last month's article by artist Seymour Fogel, "ARCHITECTURE'S REDISCOVERY OF PAINTING AND SCULPTURE."

Your Committee will continue publishing articles by artists on their thinking of the integration of arts in architecture. We welcome additional responses from architects.

DEAR MR. REDSTONE:

I should like to accept the invitation to participate in a discussion about Art in Architecture, which was extended to all Architects in the July issue of the "Bulletin," and it will partly become a reply to Mr. Fogel's contribution.

I agree with him that Arts should be deep-rooted in the soul, and I believe that our shortcomings are caused by lack of the great motivations for Art, some of which are religion and nationalism. Even fear motivated art all during the history of human life on earth, and it may be that the fearful things of art, which we see so often today, are thus motivated.

I disagree with Mr. Fogel that human values are lacking if only geometry controls the design. Geometry is a great human value, and the Pyramids are a good example for it.

I want also to state here, that architecture found its contemporary style, after the imitation of historical forms was almost completely abandoned even in the Northern part of the Western hemisphere. It was abolished by Sullivan when he designed his first buildings. May we never forget his great deeds and suffering!

Did painting and sculpturing find here in America a new style? I still see here a very confusing picture, reaching from Norman Rockwell's calendar art to Calder's suspended litter.

I believe that the American artists have to do a lot of honest soul-searching to gain a more responsible place in society.

I like to quote from a book of history, where the following observation is made: "Statues in gothic art are without mechanical office, but they are so much in harmony with the construction as to seem to belong to it."

Many of today's artists seem to sit on their haunches and yell for a niche or an empty wall space to put their object of art for display.

Some of them, however, like one sculptor from Austria, made of good contribution to architecture by designing and modeling a screen wall unit, which showed more understanding for space than one will find with many of our architects.

He gave us a gift!

I can not close without asking the following questions of Mr. Fogel: (a) What does a bordello look like from the outside (b) from the inside, and which university building reminds him of one? (c) Which music center looks like a Renaissance prison? I do not know of any like (a) and (c) here in Detroit.

In conclusion, I should like to express the sincere hope, that with a re-awakening and strengthening of spiritual values in our daily lives, from whatever sources they may come, and with an increasing sense of fairness and justice, joined by a great appreciation of human liberties, we will see a union of art and architecture, and a union of structural and ornamental elements comparable to that of the great periods of past human achievements in that area.

How it will come, and what the price will be to bring it about, I do not know, but I hope that beauty will mushroom all through the nation, and the nation will not be covered by the great dreadful cloud which looks like a mushroom, and which, let us pray, shall not, with the effort of all men of good will become a symbol of our times.—EGON WILTSCHEK, AIA

NEWS! Mr. Architect

WASCO PRODUCTS, INC., originator of the standard plastic skydome, now a department of AMERICAN CYANAMID CO., wishes to engineer the plastic skylight YOU DESIGN.

May we work with you on your current project?

New Address: P. O. Box 5353, Detroit 35

Represented by ABBOTT K. SCHLAIN CO. New Phone: 537-5252

DETROIT CHAPTER, A.I.A.

PAUL B. BROWN, President, 153 East Elizabeth Street, Detroit 1

EARL G. MEYER, Vice President, 1306 Michigan Building, Detroit 26

LYNDON WELCH, Secretary, 626 Red Cross Building, Detroit 1

LAVERN J. NELSEN, Treasurer, 20334 Grand River, Detroit 19

PHILIP N. YOUTZ, Director, College of Architecture and Design, University Michigan, Ann Arbor

FREDERICK J. SCHOETTLEY, Director, 409 Griswold Street, Detroit 26

SOL KING, Director, 345 New Center Building, Detroit 2

ROBERT F. HASTINGS, Director, 3107 West Grand Boulevard, Detroit 2

HEADQUARTERS, 120 Madison Avenue, Detroit 26

AIA

CLAIR W. DITCHY, FAIA, of Royal Oak, Michigan, is at his home after a month in Beaumont Hospital in Royal Oak, following a rather serious automobile accident on Woodward Avenue in Bloomfield Hills, Mich., June 10, in which he and his wife, Bernice were considerably shaken up. Bernice had broken ribs and other injuries, and she is convalescing at home, but Clair, who received more serious injuries, was kept in the hospital for observation. He received a concussion, for which there was an operation. For a time his speech was affected, but that has cleared. Then, also, he partially lost the use of his right hand, but that too is reported to have been corrected.

On WQRS Radio: Aug. 5—John A. Allen, AIA, "A New Approach to Apartment House Design."

Aug. 12—William W. Lyman, AIA, "Function or Frivolity in Architecture."

Sept. 9—Louis G. Redstone, AIA, "Art in Shopping Centers."

DENNIS C. SCHMIEDEKE, AIA, has announced the dissolution of the firm of Hawthorne & Schmiedeke, Architects and the formation of a new firm with Bradley Ray Storrer, AIA, to be known as Schmiedeke & Storrer, Architects, with offices at 1800 Grindley Park, Dearborn 8, Mich. The telephone number is LOgan 2-3900.

Mr. Schmiedeke graduated from the College of Architecture and Design, University of Michigan in 1954. He is registered by the National Council of Architectural Registration Boards, is a member of the teaching staff of the Department of Architecture at the University of Detroit, and has been in practice for six years, doing commercial, educational and religious buildings.

Mr. Storrer, also a member of The AIA and a graduate of the U. of M., was a member of the Frank Lloyd Wright Fellowship and has been in practice doing large residences, commercial buildings, interior and industrial design. The firm is currently engaged on religious, educational and food-service projects, together with the design and development of a new line of office and residential furnitures, employing a unique assembly system of wood and extruded metal planned for production this fall.

HERBERT E. ZIEL, Associate in charge of Air Conditioning and Ventilating for Albert Kahn Associated Architects and Engineers, Inc., was elected Chairman of the Air Conditioning in Industry Committee of the American Society of Heating, Refrigerating and Air Conditioning Engineers at its recent national conventio in Denver, Colorado. Long active in ASHRAE affairs, Mr. Ziel has served on numerous committees for the 18,000 member Society including the Industrial Environment Board and the Psychometric Chart Committee.

JOSEPH W. LEINWEBER, AIA has just returned after two years in Korea for the firm of Smith, Hinchman & Grylls Associated Architects and Engineers, Inc. Joe and his wife, Hazel spent three months on a trip around the world on their way back home.

GEORGE WAGSHAL ASSOCIATES, CONSULTING ENGINEERS, announce the removal of their offices to 153 E. Elizabeth Street, Detroit 1, Mich., telephone WOodward 1-4488, in association with Leonard H. Gussow, Electrical Engineer.

LEONARD H. GUSSOW, ELECTRICAL ENGINEER, announces the removal of his offices to 153 E. Elizabeth Street, Detroit 1, Mich., telephone WOodward 5-6336, in association with George Wagshal Associates, Consulting Engineer.

Elmer G. Kiehler

Elmer George Kiehler, AIA, member of the Detroit firm of Crane, Kiehler & Kellogg, Architects, died suddenly at Lake Orion, Mich. on June 24. He was 70 years of age.

Mr. Kiehler was born in Detroit and began his architectural career here in 1912. He was registered as an architect in Michigan in 1916, and became employed by the late C. Howard Crane, AIA, who later moved to London, England. The surviving partner in the present firm is Dixon B. Kellogg, AIA. The firm was architect for many of Detroit's major theatre-office buildings, and the Henry and Edsel Ford Auditorium in Detroit's Civic Center, done together with O'Dell, Hewlett & Luckenbach, Architects.

He was a member of The American Institute of Architects, its Detroit Chapter and the Michigan Society of Architects.

Surviving are his wife, Bernice; a son, Dr. Elmer George Kiehler, II, a sister, Mrs. Bert Allison; two brothers, Lambert and Fred Kiehler, and two grandchildren. The family home is at 305 Lake St., Lake Orion, Michigan.

On Top Since '79
J. D. Candler
ROOFING COMPANY, INC.
551 E. VERNOR HWY. • DETROIT
D. W. CANDLER •

ROOFING AND SHEET METAL WORK
INDUSTRIAL AND RESIDENTIAL
NEW ROOFS—ASPHALT SHINGLES
COMPLETE ROOFING AND SHEET METAL REPAIRS FOR OVER 82 YEARS

Photo By Baltazar Korab

ST. JOHNS EPISCOPAL CHURCH
PLYMOUTH, MICHIGAN

ARCHES — BEAMS AND DECKING
BY

TIMBER STRUCTURES, INC.

950 N. Hunter Blvd., Birmingham, Mich., MI. 4-2022

Now on standard concrete block-shapes...

1/8" THICK GLAZED FACES

in 44 Colors

With the perfection of new S-G glass silica sand forming a continuous surface, SPECTRA-GLAZE exceeds requirements of ASTM-C-126 for glazed surfaces. However, the glaze of SPECTRA-GLAZE units is more than just a surface. It's a full eighth-inch thick —the same all the way through. You can climb it, walk on it, even sandblast it without damage.

See SWEET'S CATALOG 4g/Bu for details or write for "Construction Details" and "Test Reports."

MFG. BY *Glazed Products*

INCORPORATED
4500 Aurelius Road
Lansing, Michigan

AUTOCLAVED MERCRETE *Slag* BLOCK

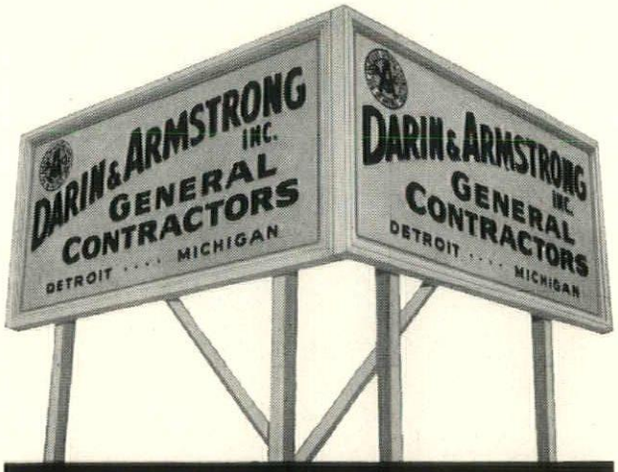
- CONTROLLED UNIFORM QUALITY
- Consistent high strength
- Pre-shrunk

Established 1923

MERCIER BRICK COMPANY

3895 ROULO AVE. DEARBORN 2, MICH. VI 3-2000

Manufacturers of
Mercrete Autoclaved Slag Block
Distributors of:
Glazed Brick, Structural Facing Tile, Acid Brick, Face Brick, Floor Brick, Quarry Tile and a complete line of Refractories.



BUILDING THAT ENDURES

Shown here are prize-winners in the competition conducted by the Tile Contractors Association of America at its Annual Convention in Detroit June 25-29, 1961. Presentations were made on "Architects' Day," June 27.

Top left shows Burton L. Kampner, AIA, of Eberle M. Smith Associates, Inc., Architects and Engineers, and his firm's First Prize — Parkside Elementary School, in Southgate, Mich.

Right picture shows Linn Smith, AIA, of Birmingham, Mich. and his Award of Merit—Wylie E. Grove Junior-Senior High School, of Birmingham, Mich.

Bottom picture shows Melvin O. Weeks, Adolph H. Roessling and Robert F. Hastings, all of Smith, Hinchman & Grylls Associates, Inc., Architects and Engineers, and the firm's Award of Merit—Wayne County General Hospital, Eloise, Mich.

ARCHITECTS' EDITORS — Among the members of Publishers for Architectural Components (PAC) meeting at the National Convention of The American Institute of Architects in Philadelphia were (from left) Editors Richard P. Zinkowski **(New England Architect);** Phil Stitt, Vice President, **(Arizona Architect);** Talmage Hughes, Secretary-Treasurer, **(Michigan AIA Bulletin);** Leon Arber **(New England Architect);** John Flowers **(Texas Architect);** Philip Kessler **(Jersey Architect);** and (seated) Clifford E. Sapp, President, **(Ohio Architect).** PAC represents official AIA publications throughout the country, directly reaching some 65,000 specifiers and buyers of construction products, and maintaining an advertising representative in New York.

HILLYARD BETTER FLOOR TREATMENTS

TROPHY CHAMPIONSHIP FINISH FOR MAPLE FLOOR GYMNASIUMS
CEM-SEAL FOR CURING CONCRETE & TERRAZZA FLOORS
WHITE ONEX-SEAL FOR INSTITUTE APPROVED TERRAZZA FLOORS
SUPERHILBRITE WAX #1 CARNAUBA WAX FOR ALL FLOORS

FLOOR HILLYARD TREATMENTS

"MAINTAINEERS" IN KALAMAZOO — GRAND RAPIDS — PORT HURON — TOLEDO — U. P. — GREATER DETROIT AREAS — ST. JOSEPH, MO.

DEN BRAVEN

M. DEN BRAVEN

established **1912**

SHEET METAL
VENTILATING
AIR CONDITIONING

9080 Alpine Avenue
Detroit 4, Michigan
WE. 3-7494-5-6

THE DUNN-RAINEY CO.

MANUFACTURERS

DR BRAND

DURA-GLAZE Elastic Glazing Compounds

MIRACLE-GLAZE Elastic Glazing Compounds

DURA-SEAL Elastic Caulking Compounds

"THE ADMIRAL" Marine Seam Compounds

Sealing Tapes
Sealing Compounds
Putty
Specialties

4461 W. Jefferson Ave. Detroit 9, Michigan • Telephone TA. 5-7156

---

109 YEARS OF CONTINUOUS BUSINESS

HARRIGAN & REID CO.

MECHANICAL CONTRACTORS

Specialists in Stainless Steel Custom Work

PLUMBING
HEATING
VENTILATING
AIR CONDITIONING

1365 BAGLEY AVENUE • DETROIT 26, MICHIGAN • WOODWARD 1-0243

THE JOHN H. BUSBY COMPANY

ELECTRICAL CONTRACTORS

WOodward 1-1681 826 Cherry Street Detroit 1, Michigan

Nelson Company

PLUMBING
HEATING &
AIR CONDITIONING
SUPPLIES

WHOLESALE

Beautiful Plumbing Display Room
Available for Architects and
Their Clients

MAIN OFFICE
and
DISPLAY ROOM
8880 HUBBELL AVE., DETROIT 28
BRoadway 3-4600

ROYAL OAK
GROSSE POINTE
ANN ARBOR

FLINT AREA CHAPTER, A.I.A.

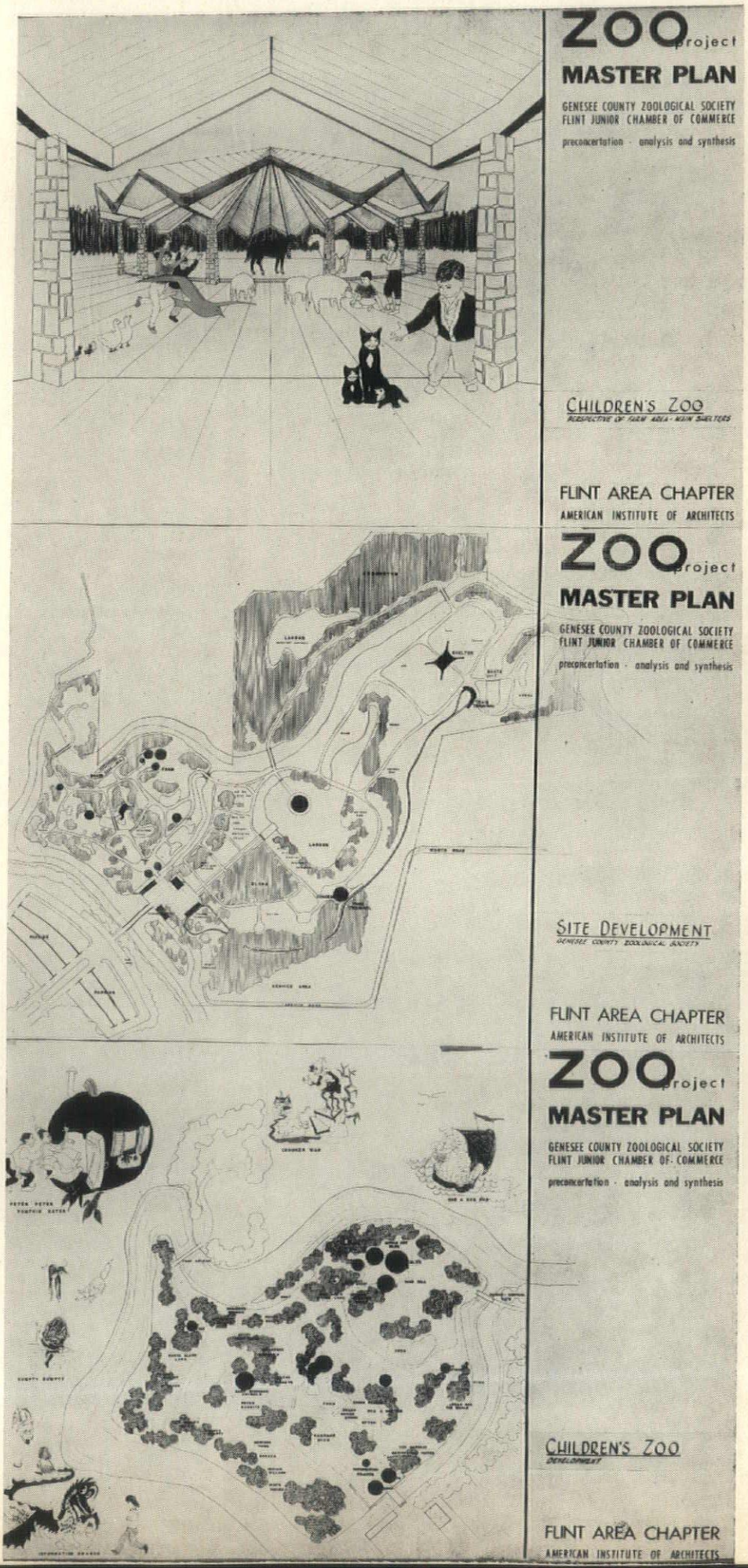
Official Publication of the Flint Area Chapter of The American Institute of Architects

Flint Zoo Project

By ROBERT S. GAZALL, AIA

The Flint Area Chapter has completed the initial stage of the development of a master plan for a Zoo Facility in the Flint area in conjunction with the Flint Junior Chamber of Commerce and the Genesee County Zoological Society. The Program has been in the making for five years and last summer, the Executive Committee of the Chapter, as a civic endeavor, undertook the master planning phase of the Zoo program. Much research has been done and traveling to various zoo facilities throughout this country in order to acquire necessary information and data. The Zoo is developed specifically for Michigan animals with a small area allocated for exotic exhibitions. It will be developed in three stages: The Children's Zoo, Michigan Zoo Part 1 and Michigan Zoo Part II. The site is located at the upper Flint River in an unused portion of Richfield Park, north-east of Flint approximately five miles and has an immediate use of approximately 100 acres. The property was relinquished by Genesee County and the City of Flint for this specific use and without cost. Among the facilities planned are adequate parking areas, administrative structures, transportation facilities which will include boat rides and train rides, concessions, sheltered areas for exhibits which would include Michigan animals, reptiles, birds and waterfowl sanctuaries. An arboretum is planned for educational purposes. Currently, the Jay Cees and the Genesee County Zoological Society are in the midst of a funds raising program to acquire monies for commencement of the initial stage of construction. Among the architect members of the Junior Chamber of Commerce who aided in much of the development are James E. Tomblinson, Gerald E. Harburn, Deane Truesdell, Dale Suomela, Charles Williams and Robert Gazall.

The Executive Committee of the Chapter elected delegates to the Michigan Society of Architects' Eighteenth Annual Midsummer Conference at Mackinac Island August 3, 4 and 5, 1961. Included are President C. E. Gibbs; Vice President T. J. Sedgewick; Secretary R. S. Gazall and Treasurer G. E. Harburn. Alternates include Directors A. H. Nelson and J. E. Tomblinson.



KOLARIK & CRONK, INC.

General Contractors

Commercial • Industrial • Institutional

263 LIVERNOIS AVENUE • FERNDALE 20, MICHIGAN • LINCOLN 8-8400

Michigan Drilling Co.

FOR

- Soil Test Borings For Foundation and Other Structures
- Complete Laboratory Testing
- Diamond Core Drilling

14555 Wyoming Avenu
Detroit 38, Michigan
WEbster 3-8717

CREATE BEAUTY BY USING

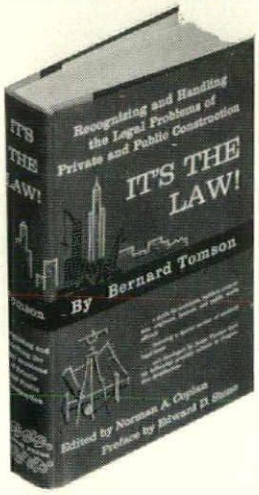
FACE BRICK

BEFORE SELECTING YOURS SEE

CENTURY BRICK COMPANY

14910 LINWOOD AVE. • DETROIT 38, MICHIGAN

See It At *Showcase, Inc.* Birmingham, Mich.



"I recommend it highly . . . The section on new 'Architect-Owner Contracts' alone will pay for the book many times over in a short period of time."
— Robert E. Alexander, F.A.I.A., Los Angeles, California

That's a typical comment about Bernard Tomson's new book,

"IT'S THE LAW: Recognizing and Handling the Legal Problems of Private and Public Construction"

Here's a book guaranteed to "save money and prevent anguish" . . . a highly-praised volume written to show YOU how to alert yourself to . . . avoid . . . or handle the ever-increasing legal problems in your field.

Featuring a special section of standard legal forms *with recommended additions and revisions*, this 436-page handbook deals with *all* the legal complexities of your profession in clear, non-technical language. It literally answers hundreds of questions that can mean the difference between a smooth, easy operation—and intolerable loss of money, time, and reputation.

Builders, engineers, contractors, architects, lawyers, and public works officials will find this book of equal use. Your rights and liabilities . . . the statutes regulating your activities . . . the employment relation in a construction project . . . restrictions on use of property . . . the organization and business problems of architectural, engineering and construction firms—these are some of the subjects to which Judge Tomson gives major attention.

Judge Tomson—as an attorney who for 25 years specialized in real estate and construction problems, as a columnist for a national architectural magazine, as a professor of architectural law at a leading graduate school, and as a frequent leader of seminars for the AIA—is uniquely qualified to have written this book.

IT'S THE LAW will be one of your most-used reference volumes. Do not fail to write for your copy today. Only $7.50—with refund *guaranteed* if you are not completely satisfied.

YOUR COLLEAGUES URGE YOU TO BUY THIS BOOK

"Mandatory for professionals in the arts of building, for government officials, and others who embark on the complexities of building projects."
Edward Durrell Stone

"Knowledgable and useful . . . of signal importance. Can save money, time and prevent anguish." *Dean Olindo Grossi, Pratt Institute*

"When problems of law and architecture become important, the one person who comes to mind is Bernard Tomson. It is a great benefit to the profession that a new Tomson book has appeared." *Thomas H. Creighton, Progressive Architecture*

SPECIAL FEATURES

Special section of forms . . . index of problems, cases, decisions . . . preface by Edward D. Stone . . . 6 x 9 in size, 436 pages . . . five major parts, from regulations on practice to zoning . . . money-back guarantee to all purchasers!

MONTHLY BULLETIN, MSA
120 Madison Ave., Detroit 26

Please send _____ copy (copies) of Bernard Tomson's IT'S THE LAW at $7.50 each to:

Name_____

Company_____

Address_____

City and State_____

Annual Outing at Tipsico Lake of Indefatigible Congress of Master Craftsmen

JOHN E. GREEN CO.
INCORPORATED

MECHANICAL CONTRACTORS

Our 52nd Year

Detroit, Michigan

TOwnsend 8-2400

PALMER-SMITH COMPANY
GENERAL BUILDERS

TEMPLE 3-2114
415 BRAINARD STREET
DETROIT 1, MICHIGAN

DETROIT PARTITION COMPANY

MOVABLE PARTITIONS

WOOD - STEEL - ALUMINUM - FABRIC - GLASS

DESIGN — ENGINEERING
FABRICATION — ERECTION

15850 Wyoming • Detroit 38
UNiversity 4-7708

Rohn Fireproofing Co.

GYPSUM ROOF DECKS

INTERIOR MASONRY PARTITIONS

9400 Central Ave. • Detroit 4 • TExas 4-2590

VERMARCO

Member MIA MARBLE INSTITUTE OF AMERICA, INC.

THE DETROIT MARBLE CO.

Sales Representative VERMONT MARBLE CO.

Quarriers • Importers • Finishers • Contractors

DOMESTIC & IMPORTED MARBLE & GRANITE
MARKWA — THIN MARBLE TILE

14255 Schaefer Rd., Detroit 27 • BR. 3-7088

PAR-FIAM INC.

740 Dix Avenue South
DETROIT 17, MICHIGAN
Telephone 843-5100

822 Cherry St. S. E
GRAND RAPIDS 6, MICHIGAN
Telephone 458-1173

MASTER DISTRIBUTORS FOR DOW CHEMICAL COMPANY BLDG. PRODUCTS

*STYROFOAM *Insulation Board and Construction Board*
*THURANE *Rigid Urethane Foam Board*
*SCORBOARD *Perimeter Insulation*
*ROOFMATE *Comfort Insulation for Roof Decks*
*POLYFILM *For Agriculture and Construction*
*ETHAFOAM *Buoyancy and Industrial*
*SARALOY *400 and 200—Elastic Flashing*
INSULATION SUNDRIES *and Adhesives*

Acme Window & Door, Inc.

Division of Pioneer Fireproof Door Corporation

Hollow Metal Doors & Frames

All Metal Frames Manufactured In Our Detroit Plant

CR 8-5200
2728 JOHN DALY ROAD, INKSTER, MICHIGAN

offering...

a wide range of products and services to architects who demand quality, service and dependability

- Supersines
- Bronze and Aluminum Tablets
- Cast and Fabricated Letters
- Custom Designed Signs and Symbols
- Traffic Control and Street Signs

Manufacturers ... Distributors

THE SUPERSINE COMPANY

17131 Van Dyke Ave., Detroit 34, Michigan

TWinbrook 2-6200

Associated with Brown and Raisch Co.

Acorn Iron Works
INCORPORATED

FABRICATORS & ERECTORS OF STRUCTURAL STEEL AND MISCELLANEOUS IRON

9260 Freeland Avenue, Detroit 28 • TExas 4-9090

BUILDERS & TRADERS EXCHANGE OF DETROIT

LYLE E. EISERMAN, President
301 Farwell Building, Detroit 26, Mich.
FRANKLIN J. KNIGHT, Vice-President
23845 Sherwood Ave., Centerline, Mich.
ROBERT A. CARTER, Vice-President
13305 Capital Ave., Oak Park 37, Mich.
RALPH W. MOORE, Treasurer
1032 Fisher Building, Detroit 2, Michigan

WILLIAM C. DENNIS, Secretary-Manager
2210 Park Avenue, Detroit 1, Mich.

JOHN L. McGARRIGLE, Ass't Sec'y-Mgr.
2210 Park Avenue, Detroit 1, Michigan

DIRECTORS: Edward C. Chase, Peter J. Koenig, Richard J. Kullen, Louis J. Perrone, W. Rodman Turner

Estimating School 1961 Fall Term

The Estimating School, operated by the Builders & Traders Exchange of Detroit since 1936, will again offer two courses this fall. The chief aim is skill in interpreting plans and the taking off of quantities and materials for the architectural trades. Each student works directly from a complete set of plans and specifications.

The two courses are "Introduction to Estimating" held Monday evenings beginning September 11th and "Construction Estimating" held Tuesday evenings beginning September 12th.

"Introduction to Estimating" is a basic course teaching the fundamentals of estimating. Students work from drawings of a small, modern home and a typical small commercial building to learn plan-reading, measurements and interpretation; plus systematic methods of take-off and pricing. This course may be used as a prerequisite to the advanced course. Anyone working in the construction industry or allied fields with a minimum of a high school education including ordinary arithmetic is eligible.

"Construction Estimating" is more advanced and is directed to the systematic take-off of quantities with emphasis on pricing and costs. Working directly from drawings of a two-story commercial building, students make a detailed take-off of all architectural trades. Quantities are priced, resulting in a complete estimate of the cost, including overhead and profit. Sources of material are analyzed and explained. This course is particularly valuable for those who desire to become estimators, and for practising estimators who want to improve their methods. To be eligible for this class, one must have completed the "Introduction to Estimating" course, or be familiar with commercial plan reading, interpretations and measurements.

Registration for the Fall Term will be held Thursday evening, September 7th from 6:30 P.M. to 8:30 P.M. at the Exchange Offices, 2210 Park Avenue, Detroit. Persons expecting to enroll must pay tuition fee of $25.00 at that time.

Michael F. Kenny is the instructor. Classes are held one night a week for 15 weeks at the Exchange. For discussion of eligibility or any other information call Herman Marsh at WOodward 2-5500.

AQUARAMA CRUISE

Several hundred members and guests, including several architects and their wives, were aboard the S. S. Aquarama for the third annual cruise sponsored by the Entertainment Committee of the Exchange. Also aboard were large groups representing the Greater Detroit Board of Commerce, the Associated Underground Contractors, and the Michigan Association of Plumbing Contractors.

Among the features of the evening was the customary leisurely cruise on Lake St. Clair to the Flats and vicinity, returning about five hours after the 6 P.M. departure. Guests were provided with a well-balanced program of entertainment. There were orchestras for dancing, a variety floor show, entertainment in two theaters, deck games and refreshment facilities. The weatherman cooperated in splendid fashion having provided a typical summer day with the temperature slightly over 80 degrees. It was a most enjoyable evening and the majority of those who shared in it are looking forward to a similar affair next season.

Members of the Entertainment Committee responsible for the promotion of this outing are: Jack W. Vinton, Chairman; Charles H. Chapman, Vice-Chairman; A. M. Arthur, C. F. Clark, Loren A. Cosens, Robert G. Haupt, Edward P. Hickey, Kenneth M. Matheson, Frank E. Mitzel, Edward J. Shereda, and Herman F. Marsh, Secretary.

EXCHANGE TO SPONSOR DINNER DANCE

An innovation in Exchange activities will take place this Fall when the Entertainment Committee will sponsor a dinner dance for the first time. In anticipation of a large attendance the Committee has arranged for the exclusive use of the Latin Quarter for the evening of Saturday, October 28th. Dance music and entertainment will be provided by Frank Paul and his orchestra. Final plans are still in the formative stages and complete details and reservation forms will not be available until early in September — mark your calendar now; you won't want to miss this event.

SHAW, WINKLER, INC.

PLUMBING & HEATING

POWER PLANT INSTALLATIONS

VENTILATING AND AIR CONDITIONING

14855 Ward Ave., Detroit 27, Michigan • VErmont 8-0500

B. E. BROWN, **President**
W. E. HANEL, **Vice President**
R. E. PARISIAN, **Treasurer**
J. REVELL HOPKINS, **Secretary**

DIRECTORS: **Allen E. Conrad, George L. Root, Harold V. Minnis, Robert Anderson, Donald A. Simon, Robert White, Architectural Representative, Robert A. Mattern, AIA**

Work Clothing And Safety

Work clothing plays a more prominent role in on-the-job safety than is usually appreciated. The Institute of Industrial Launderers has long been active and interested in this field, since member companies of the Institute supply, on a rental basis, more than 90 percent of the work uniforms used in industry. The Institute has worked with the National Safety Council and the American Standards Association to help draw up standards of safety in work clothing.

This is a field of special interest in the concrete construction industry because much of the work is relatively hazarous. Compensation claims and insurance premiums are often so high that preventing even one major accident may well pay for a uniform program for many years.

Where employees furnish their own work clothing, they may well be reporting on the job "dressed to kill." Experience has shown that when the choice is left to employees, their tendency is to wear work clothing which is not good enough for any other purpose.

Unfortunately, such clothing has many "built-in" accident hazards. Consider, as an example, a situation that is relatively commonplace: the missing button on the shirt sleeve cuff. It doesn't seem important and the worker ignores it—until the dangling cuff gets caught in moving machinery and an injury is incurred.

Or consider another typical accident: a worker reports on a job wearing a pair of old trousers that he has furnished himself. Purchased originally for street wear; the trousers have cuffs on the pants legs. The man climbs up to inspect some equipment. The cuffs catch on a projection and he falls. At the compensation hearing, his doctor testifies that he is disabled for life. There are countless projections around construction sites that trouser cuffs can catch on, resulting in crippling—and expensive —falls.

Burns are also a major hazard when work clothing becomes soaked with oil or grease. Under these conditions serious injury may result from merely lighting a cigarette. Obviously flammable clothing (or clothing which has been impregnated with cement dust or foreign materials which can cause skin irritation) should be changed frequently. But greasy clothing creates a mess in the family washer, which wasn't designed to remove stubborn industrial stains, and so the hazard is tolerated.

Member companies of the Institute of Industrial Launders insist upon one ironclad rule—that any rips, missing buttons and other defects in the uniforms they supply be taken care of immediately after laundering. If your company does not use the services of an industrial laundry, it is advisable to insist that employees take the same precautions.

Uniforms should be practical and selected carefully with due consideration of on-the-job conditions. In choosing a uniform, the Institute suggests that the following points be kept in mind: (1) Cotton uniforms are best for most purposes. (2) Standard colors are preferable. (3) Unnecessary decoration should be avoided. (4) Company identification can be obtained by the use of well-designed company emblems. (5) Since drivers are more often seen by the public than other employees, their uniforms should always be clean and attractive, and should bear the company identification to assure their acceptance as its representative.

Finally, it is wise to have the uniform laundered several times by an industrial laundry in order to test such factors as shrinkage, color fastness and tensile-strength loss. The Institute of Industrial Launderers maintain a free consulting service for firms interested in adopting uniforms or changing their present uniforms. The sole objective of this service is to recommend general specifications which would assure that the new uniform will meet on-the-job conditions of the company concerned.

BID DEPOSITORY

The Bid Depository of San Diego County, a cooperative, non-profit organization, has been formed to serve as a bid-deposit and distribution center for the local construction industry. Offices of the new organization are at 3907 El Cajon Boulevard, San Diego, California, where the Allied Trust Fund Administration Service will act as bid custodian.

Function of the depository was outlined by E. H. Larson, president, who said, "This is a voluntary association of construction industry trade associations. Its purpose is to protect the great construction industry, in all its ramifications, from sharp practices which increase costs, weaken quality, and destroy public confidence."

Any awarding authority, whether architect, owner, governmental organization, or general contractor, may certify the San Diego Bid Depository as the official trustee through which subcontractors, suppliers, or others shall submit bids on a specific project. Use of the bid depository is provided awarding authorities without charge, but once the depository has been appointed for a specific job, the awarding authority must award the contract to the low acceptable bidder in each category on which competitive bids have been requested. Categories of work covered include electrical, plastering, plumbing, painting, roofing, and the work of other sub-contractors and suppliers.

Bonded employees of the bid custodian receive sealed envelopes containing subcontractor bids, time-stamp the envelops, and place them in locked boxes until the scheduled bid opening. Awarding authorities may reject bids from any bidder with whom he does not wish to work. This is done by marking the unopened bid envelope "rejected," signing it, and returning it to the bid custodian.

The Bid Depository of San Diego is intended to benefit all parties to a construction project by promoting ethical business practices and stimulating true competitive pricing. The bid depository system assures owners and awarding authorities the lowest practicable cost for each segment of a construction project.

The Bid Depository of San Diego was organized by the Construction Subcontractors Association of San Diego, a non-profit trade association. Functions of the depository and of the bid custodian are under supervision of the Board of Governors, composed of representatives from each subcontracting trade association, general contractors, architects, and engineers.

THE PRODUCERS' COUNCIL Inc.

NATIONAL ORGANIZATION OF BUILDING MATERIALS AND EQUIPMENT MANUFACTURERS

Official Publication, Michigan Chapter

M. EUGENE HANNUM, President
EMRYS L. WILLIAMS, Vice President
CHARLES E. THORNTON, Secretary
EUGENE L. HAMBLETON, Treasurer

VERA KHORANOFF, Recording Secretary
14420 Livernois Avenue
Detroit 38, Michigan
TOwnsend 8-2600

Formica Corporation Dinner Meeting at Sheraton-Cadillac Hotel, Detroit, under Auspices of Producers' Council

Bulletin Board

GEORGE LEVIN, CONSULTING ENGINEER, writing on "Contracts . . . Tailor-Made or Standard Form," in the Consulting Engineer, includes this statement: "I think it best to state what you propose to do in a forthright manner. What you propose to do may not be completely satisfactory to your client, but at least it will not be misunderstood. As a young lady once pointed out, 'Although they both lead to the same thing, there is a big difference between a proposal and a proposition.' One of the differences is the manner of presentation. It is your move, your initiative, and therefore, you must say what you, as the consulting engineer, propose to do. Just for good measure, you add what you propose not to do. Of the two things—what you are going to do and what you are not going to do—I think that a frank statement of the latter is the more important in establishing a pleasant relationship between engineer and client."

MRS. CAITLAN THOMAS, widow of the late distinguished poet, Dylan Thomas, in her book, "Leftover Life to Kill," relates many of her late husband's eccentricities: He liked to fib. It was his custom to go out alone to a movie, and when asked what he had seen to say he had been to a movie house other than the one he did attend. Then he would proceed to tell a wierd story of the plot of his imaginary movie, making it up as he went along.

SHORTEST POLITICAL SPEECH on record, reports a subscriber from Connecticut: "I never stole a dime in my life. All I ask is a chance."

"Too many people," observed a modern wag, "fashion their lives after French bread—one long loaf.

SIGN NEAR A SCHOOL in Geary County, Kansas: "Please Drive Carefully. Don't run over the children. Wait for the teacher."

A SMALL TOWN is one where the postmaster knows more than the schoolmaster.

A GO-GETTER, in some offices, is the fellow they send out for coffee.

DOES ANYONE in your family suffer from insanity? No, we all enjoy it very much.

MONDAY, is the worst day of the weak.

TV BLOOPERS, from the book by Kermit Schafer: At Heitman's you will find a variety of fine foods, expertly served experienced waitresses in apetizing form.

Before our next record selection, here's an item of interest: last night at Municipal Hospital there were 42 babies born. And now, "Don't blame me."

On a TV commercial Betty Furness gave out with this advice: "Try your Westinghoush washer with a full load on."

And now Nelson Eddy sings "While my Lady Sleeps," with the men's chorus.

You'll hear about these wonderful cupcakes during the curse of the next commercial.

On the radio quiz, "Share the Wealth," contestants were asked to name several events in history associated with animals. When the quizmaster came to Lady Godiva, a young lady contestant unhestiatingly answered, "Bear!"

ARCHITECTURAL CRITICISM is a touchy subject. Now and then one lambastes another and it rolls off like water on a duck's back. Results are all that counts, the criticized one says, so he joins Liberace in replying to any critic: "I read your letter on the way to the bank."

CHARLESTON ACCENT, from Lord Ashley Cooper's Dictionary of Charlestonese: Bone-Blessed event. "I was bone a Charlestonian."

Ain't—Sister of one of your parents.

Braid—What you make toe-est from, to go along with beckon and a-igs for breakfast.

Cain Chew — Aren't you able to? "Cain chew talk like a good Charlestonian?"

Flow—What you stand on in a house.

Pain—A writing instrument mightier than the sword.

Poet—To transfer a liquid. Poet from the pitcher to the glass.

Abode—A wooden plank.

Hail—The abode of integrationists, some "damyankees," and other evil spirits.

Ice Cool—Midway between grammar school and college.

Layman— Afruit from which laymanade is made.

Passe—Father has spoken.

Sex—One less than seven, two less than eh-et, three less than noine, fo less than tin.

Yawl—Mode of address used by N'Yawkers while visiting in the South.

ROGER ALLEN, FAIA, of Grand Rapids, tried desparately to resign from a book club, only to be hounded by new books and perforated billing cards every month, in spite of his frenzied pleas. His ultimate solution was to punch several new holes in the card, returning it to the book club without comment. He's been liberated ever since.

A MIRROR reverses left to right, but not top to bottom, and no one knows why.

I WONDER if Mrs. K. irons curtains.

Advertisers

Acme Window & Door, Inc. 36
Acorn Iron Works 36
American Aggregates Corporation ..... Insert 28-A
Anderson Windowalls 24
Austin's Painters 22
Blumcraft of Pittsburgh 8
Books (Monthly Bulletin) 34
Brown & Raisch 36
Busby, John H. Company 32
Cadillac Asphalt Paving Company 26
Candler, J. D. Roofing Co., Inc. 29
Century Brick Company 34
Cinder Block, Inc. 6
Crawford Door Company 20
Crawford Marvel-Lift Garage Doors 20
Darin & Armstrong, Inc. 30
Dearborn Welding Company 16
DeCroupet Iron Works 16
Delco-Matic Garage Door Operators 20
Den Braven, M. 32
Detroit Edison Company 2
Detroit Marble Company 36
Detroit Partition Company 36
Dunn Rainey Company 32
Glanz & Killian Company 26
Glazed Products, Inc. 30
Glazex ..... 2nd Cover
Grand Hotel 10
Great Lakes Fabricators Association 20
Green, John E. Company 35
Harlan Electric Company 1
Harrigan & Reid Company 32
Hay-Con Tile Company ..... 2nd Cover
Hillyard Better Floor Treatments 32
Kimball & Russell, Inc. 24
Kolarik & Cronk, Inc. 34
Kurtz Brick Company 22
Leggette, R. E. Company 16
Long Sign Company 16
Mahon, R. C. Company ..... 4th Cover
Mercier Brick Company 30
Michigan Consolidated Gas Co. 12
Michigan Drilling Company 34
National Architect (Mailing List) 16
Nelson Company 32
Palmer-Smith Company 36
Par Foam, Inc. 36
Portland Cement Association 4
Price Brothers Company 18
Plumbing & Heating Industry of Detroit ..... 3rd Cover
Rohn Fireproofing Company 36
Schlain, Abbott K. Company 28
Shaw Winkler, Inc. 37
Sheet Metal Contractors Association of Detroit Industry Fund 28-B
Spitzley Corporation 18
Stevens, Frederick B., Inc. 28-B
Supersine Company 36
Timber Structures, Inc. 30
Williams Equipment & Supply Company 24
Wolverine Marble Company 26

3

SOUND REASONS FOR SEPARATE MECHANICAL BIDDING

By employing Separate Mechanical Bids, the architect and engineer can consistently provide high quality installations to the owner at a price which is invariably lower, to the owner, than that obtainable when working through a middleman.

1. When bidding is confined to pre-qualified Mechanical Contractors, you can be sure that less supervision will be required . . . that the firm selected will require less guidance and have a better understanding of the installation. By pre-qualifying mechanical bidders, the possibility of having an entire project delayed by some cut-rate sub-contractor, who has been selected solely on the basis of a cheap price to the middleman, is eliminated.

2. The pre-qualified "Mechanical" Contractor, working with the architect and engineer, can frequently advise on minor changes which might well preclude future major problems. He is in an excellent position to co-operate in providing a good workable installation for the owner.

3. Satisfied clients are long term clients. The architect and engineer who establish a reputation for designing buildings and preparing specifications so that the owner receives greatest value in relation to expenditures, build an enviable client list and reputation.

1510 Mutual Building P·H·I PLUMBING & HEATING INDUSTRY OF DETROIT *WOodward 3-8623*

Plumbing & Heating Industry
of Detroit

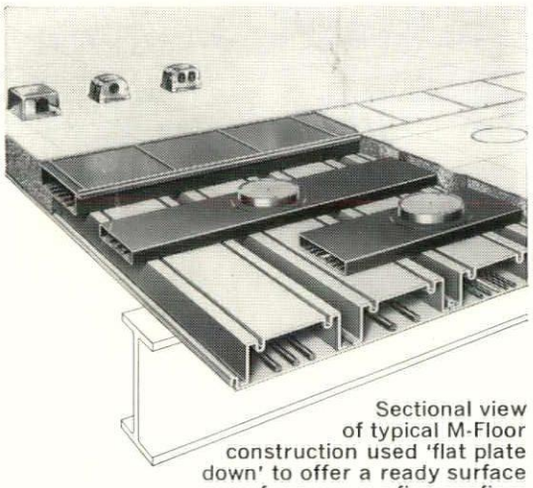
MAHON
M-FLOORS
MEAN

architectural advantages

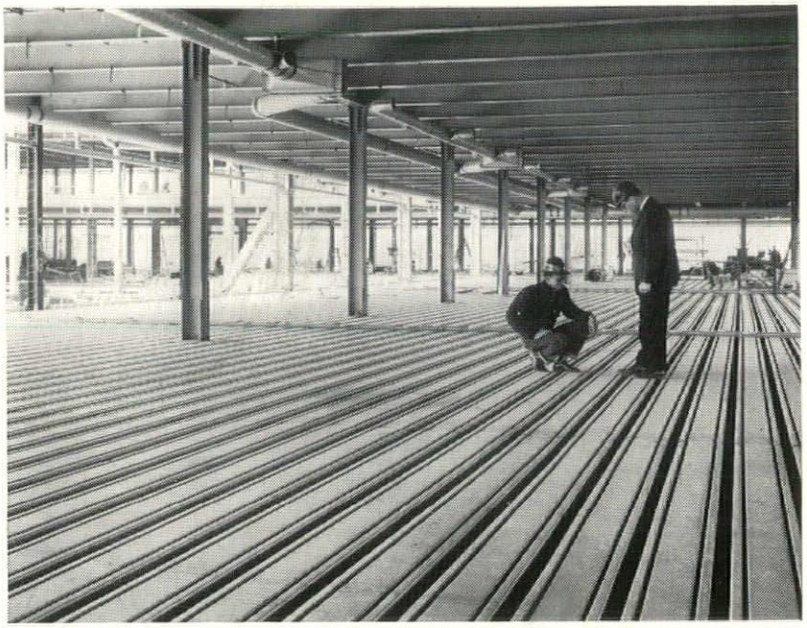
■ FUNCTIONAL STRENGTH
■ SPEEDY ERECTION
■ EXTRA-CAPACITY CELLS...

PLUS

EASY LOW-COST FIREPROOFING

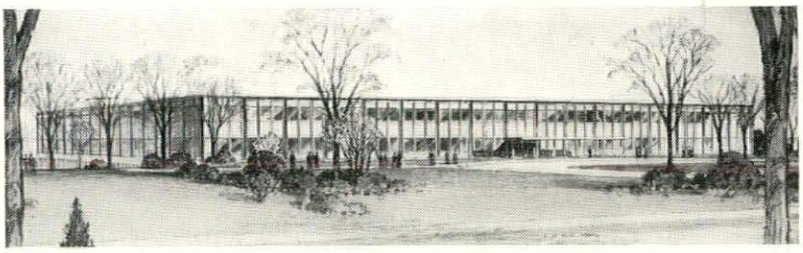


Sectional view of typical M-Floor construction used 'flat plate down' to offer a ready surface for spray-on fireproofing.



Mahon 3-in. beam depth M-Floors, during erection in eastern Pennsylvania project. General Contractor: McCloskey, Inc., Phila.

Artist's rendering of new facility for steel company. M-Floors permit quick . . . and flexible . . . electrical wiring of the facility. Architects: McKim, Mead & White, New York



■ Architects and engineers appreciate the proven advantages of Mahon M-Floors—application-designed for today's projects and tomorrow's demands. M-Floors are lightweight, high-strength steel cellular sections, in depths, spans, gages, and types to economically meet most criteria. They provide an ideal steel sub-floor for any kind of floor covering and have a high raceway capacity for the efficient electrical servicing of every square foot of floor space. Used flat-plate down, Mahon M-Floors permit full-depth concrete fill for maximum structural strength at supports, at the same time offer an even surface for easy and effective low-cost spray-on fireproofing. Find out what versatile M-Floors from Mahon can do for you . . . your designs . . . your budgets. Write for technical Catalog M-61 or see Sweet's Files.

other Mahon building products • Aluminum or Steel Curtain Wall • Metalclad Fire Walls • Rolling Steel Doors • Long-Span M-Deck • Steel Roof Deck • Acoustical Metal Walls, Partitions and Roof Deck **Mahon construction services** • Structural Steel—fabrication and erection • Steel Fabrication—Weldments • Geodesic Domes—fabrication and erection.

SPEEDING AMERICAN CONSTRUCTION WITH METAL BUILDING PRODUCTS, FABRICATED EQUIPMENT AND ERECTION SERVICES

THE R. C. MAHON COMPANY
DETROIT 34, MICHIGAN

Manufacturing Plants—
Detroit, Michigan and Torrance, California
Sales-Engineering Offices in Detroit, New York, Chicago, Torrance and San Francisco
Representatives in all principal cities.

MAHON